

THE ATLANTIC MONTHLY

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BIRDS OF A FEATHER

BY MARCEL NADAUD

I. FOUR OF A KIND

TRANSLATED BY FLORENCE CONVERSE

I. THE R.G.A.

UNDER the pavilion of the Gare du Nord, Papa Charles waited patiently for Chignole and Flagada, with whom he was to take the six-o'clock train for Plessis-Belleville. He had parted from them about midnight, after the Bassinets' dinner; a gay little dinner, at which M. Bassinet, slightly elevated, had proposed a number of rococo toasts to victory, to the soldiers 'on the job,' and especially to the aviators — 'those heerroes!' and Flagada had captured the assembly with several monologues in his best vein.

The ladies had not been so merry. Madame Bassinet bitterly bewailed her sauces, which disappointed her fastidious palate. 'But it is all your fault. A good dinner must not be kept waiting, and you were a full hour late.'

'I have already told you, M^{me} Bassinet, that these children had their little special engagements. I know what it is to be young. Listen, gentlemen: I, — yes, I —' And M. Bassinet was in the middle of one of his raciest stories before a withering glance from his wife could warn him of Sophie's presence.

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'O little daughter, little daughter, do hurry up and get married! Then I shan't have to be forever twisting my tongue seven times over, before I dare speak.'

'But, papa, is it I who make the delay? As far as I am concerned, it cannot be too soon. And — I think Chignole agrees with me.'

Chignole did not answer; he closed his eyes, the better to commune with his soul, and bent his head in fervent acquiescence. If the truth were told, he was a bit ashamed and secretly reproached himself: 'You have been outrageously silly, my poor Chignole, to let your head be turned till you forgot your own little Paris, Sophie, the good work-a-day life. Of course, it was the fault of that damnable climate of the Côte d'Azur, that goes to your head like a slow waltz or like one of Papa Charles's amber-tipped cigarettes. Yes, I confess; I was an ass. It is risky for a man to look on at such a fairy show as that; he wants to be somebody. — And because I dressed the part, I thought I was the hero. — Ah! such an idiot!'

No; Sophie was not to be compared to those women down there: to those

parasites, languidly parading their insatiable curiosity and their sensual nostalgia; those seaside belles, with their painted faces, flaunting their brazen wretchedness in the sun; those bold-eyed women of Piedmont gathering tuberoses in the gardens of Cimiez.

No, she was not at all complex, the little stenographer; but he knew her to be so loyal, so sincere, so devoted, so truly his own, that he could not but prefer her to those others.

'It is quite true, my children, I don't deny it; we might have taken advantage of Chignole's convalescent leave, to celebrate your marriage; but *primo*, our ace has decided to cut it short in order to go back immediately with his chief; and *deusio*, we are at war. A conventional Paris wedding — how dull! I have therefore decided.' — M. Bassinet lifted an Olympian eyebrow and emptied his glass. — 'You are never billeted on the firing-line; always some kilometres behind; so, the moment you are settled in your new quarters, we plan to arrive in the neighboring town, and there, close to the front, as gay as you please, you shall be joined together. I have said it.'

'And what if someone rings the concierge's bell while I am gone?'

'Mâme Bassinet, we can pay for a substitute. What is the sense of putting away money for our funeral, these twenty years, if we may not nibble at it in honor of little daughter and her aviator?'

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Time dragged, for Papa Charles. 'They must have forgotten to wake them. Devil take it! — we shall come out of this with eight days' close arrest.'

Cool as a cucumber, his tall figure swinging along jauntily, he resumed his stroll on the platform.

'Hue, Lolotte! — Hue!' M. Bassi-

net, with a flourish of his whip, urged on Lolotte, who described an elegant arc and drew up at the curb.

'Here we are!' Chignole and Flagada hurtled through the carriage door. 'Don't forget that we hit the hay rather late, old man; it took a bit of coaxing to get us up this morning.'

'Not to mention the fact that the ladies could n't let their Chignole go till they had hugged him, all round. Over and over, I protested, "You will spoil that boy!" but it was no use talking. They could n't part from him. — Women, you understand' — M. Bassinet shrugged his shoulders, a gesture of disillusion; then, 'My dear aces, don't let me delay you. I won't say, "Good luck," that's a hoodoo; but I'll think it. You are off, eh? Get at their insides — as far as it'll go — for you, and for the old jackasses like me who can't do it. And Chignole, my boy, if ever you find yourself strapped, if you need a little chink, just drop me a line, "Pursetorpedoed." I shall understand.'

Arm in arm, the three friends entered the station. Chignole let his bag fall on the toes of a civilian, and the delicate little joke appealed to them all immensely.

M. Bassinet watched them disappear. 'Poor lads! Brave lads!' — With his coat-cuff he tried to wipe away the tears that would come.

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Plessis-Belleville. They leave the station, turn their backs on the village, and follow the long road leading to the offices of the *Réserve Générale d'Aviation* (R.G.A.).

'It's agreed, Flagada? We don't separate? I was to pass on to a Spad with Chignole, but I shall ask to stay on the Voisin. Really, you know, I do like my old cuckoo — we shall probably get our chance at night-flying.'

Flagada stammered his thanks, but Papa Charles cut him short. 'You'd better let me pull that off with the commandant. The stunt will be to make sure of the delivery of the busses, and get to the front before evening.'

'Right-o!'

'And, I say, Flagada! don't load up here with an observer. We'll try to find somebody in the squadron, who'll fit in with us.'

'Somebody who can see a joke — what? I did n't go to war to be bored.'

Rotary motors were detonating; stationary engines purring; the air reeked with the smell of burning oil; motor-cyclists, dispatch-bearers, raced toward the hangars; mechanics worked at the planes with the apparent carelessness which characterizes sustained activity. Near the shed where the anemometers and weather-gauges were set up, a group of pilots discussed the latest news by telephone from the meteorological stations.

After breakfast Papa Charles and Flagada submitted themselves to the many formalities of the organization. Chignole scrutinized the machines, detecting every possible flaw. He bound the piano wires near the propeller with twisted thread, so that if they snapped they should not get within the swing of its orbit and cause an accident. He regulated the indicators along the rim, and set in the cockpit a box containing thirteen grains of salt, the mascot that never fails.

They're off! The engines revolve. Papa Charles, his hand on the gas-throttle, listens carefully, then switches off. The purr of Flagada's machine sounds normal.

'Ready?'

'Well!'

Papa Charles signs to the mechanics to remove the blocks.

'One minute,' cries Chignole; 'there's the commandant.'

They wait for him, and he comes running. 'If you have to land *en route*, look out for jarring on bare ground. Two of your comrades were killed between Vauchamps and Champaubert. Careful, eh? Cut out the drinks.'

'That's what we're here for, sir.'

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Two hundred metres! On the right, Paris, in a veil of tawny clouds. On the left, Ermenonville, the Isle of Poplars, the empty tomb of Jean-Jacques, and the willows that bewitched Corot. Farther off, Nanteuil, Villers-Cotterets, Soissons — the Boches.

'Flagada is n't half bad,' said Chignole complacently, pointing to their friend who flew in their wake.

Meaux; they are following the Petit Morin. Papa Charles studies the route carefully.

'There it is.'

'What?'

'Where they came a cropper.'

In a meadow at the edge of the stream, a shattered aeroplane made the sign of the cross.

'Wheels in air — a regular somersault! — Engine topsy-turvy. — They must have been green hands, those fellows.'

The biplanes descended in a spiral to salute the dead bird, then rose again and flew for Vertus and Bar-le-Duc, where they were to learn their ultimate destination. Contrary to habit, Papa Charles and Chignole were silent. Their flight absorbed them, possessed them. As sailors feel the lure of the sea when they hear the booming of the great deep in the shrouds, at the crossing of the bar, so these two, once again free in space, were seized with passionate desire to ride the air. They longed to mount up forever, always higher, toward the light, in the enthralling dash of the machine.

II. FLAGADA REVEALS HIMSELF

'Oh, yes; we all know! You are aces and we are two-spots. Nobody denies it. But when it comes to night-flying — we're always at your service, messieurs les chasseurs!'

Although he had been in Bar-le-Duc hardly more than fifteen minutes, Chignole had already contrived to stir up a dispute about the respective merits of battle-planes and bombing-planes. At the pilots' mess, before a noisy but sympathetic audience, he sang the praises of the biplane with the wide wing-span.

'I know; I know; you fly zebras and we, elephants. Just the same, Papa Charles and I are still willing to do our climbing in the old family bus. — You saw? — Papa Charles was a trifle close for landing; he cut off the gas, but the mill¹ would n't stop. If we'd been on one of your planes that go slashing through the air like a razor, we should have been sliced off like a head of lettuce — while on ours we stood the shock as easily as a bird!'

'Pour him out a drink — Then he'll give you a rest from his airy romancing.'

Enter Papa Charles with Flagada.

'I have the orders. We rendezvous at Nancy, to-morrow.'

'Our old crowd?'

'Perhaps; we shall see; we should worry. This evening a squadron of Farmans is to bomb behind the front at Verdun. The commandant has asked us to join, as it is not complete.'

'And you accepted with enthusiasm.'

'Apparently.'

'Then, I pause in my discourse.'

'I was about to suggest it.'

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A pale row of acetylene lamps marked the starting-line. The two biplanes

¹ The engine, in aviation slang.

were side by side, their engines at low speed. Flagada and Papa Charles, smoking a last cigarette, placidly studied their maps. Chignole flitted nervously from one to the other.

'I don't think it prudent for Flagada to fly alone.'

'I would rather be alone than with an observer whom I don't know.'

'But how about the bombs?'

'The mechanics have placed a release close to my hand.'

'Just the same, — remember what I say, — I know a little something about night attacks; I've been there before, young fellah; you have n't.'

And Chignole swelled his chest and eyed his comrade with a fatherly air.

'The Farmans don't take any chances.'

'Hop on, Chignole!' And to Flagada Papa Charles shouted, 'I shall show a light from time to time. Try to follow us.'

'Zou!'

With the noise of their motors enhanced tenfold by the stillness of the night, the two machines leaped toward the huge, overgrown, yellow moon that seemed to smother out the stars scattered over the sky.

'Clear weather; luck's with us!'

'I'd prefer a few clouds. They're going to wing us, over the lines — and we're not so very far away from them.'

Papa Charles pointed out to his companion the bluish flashes from the firing of the big guns.

'Do you see the Farmans?'

'No; but they ought to be caught in the searchlights by now.'

Before them, the spindles of light wavered, crossed, pursued their fleet prey, and tried to clutch it.

'Those searchlights are on autos; they're feeble things; we should worry!'

But suddenly a beam whose brilliancy eclipsed the others ran up the sky. It turned, hesitated, lost its way,

then discovered their machine and held it.

'Now's the time to show them we're not rookies!'

'Take your place for the tango!'

Papa Charles pulled the joy-stick; the aeroplane nosed up, leaped, took a tail-dive of several hundred metres. But the ray of light held on. Clinging to his course like an old sea-dog to the rudder, Papa Charles repeated the same manoeuvre with variations. He would run down in daring glissades, then turn abruptly and dart up again. And always the white ray caught them again and blinded them. The anti-aircraft guns began to volley fiercely; their aim was getting dangerously accurate; the fliers could already feel the shock of exploding shells.

'What's got into them, anyhow?' growled Chignole, his face buried in his arms.

'They think they've got us, that's what! I can't see any more.'

Behind them Flagada, helpless, looked on at this duel between the dizzy moth and the devouring light. With eyes bursting in his head, he turned, swayed, climbed, fell back again into the entangling net of implacable light that was driving him to destruction.

'What to do! — What to do!'

The horror of the situation stupefied him. He looked down, despairing, on the bright spot from which the deadly rays diverged. Then, suddenly, an idea flashed into his head. 'Yes; at least I can try it.'

With the boldness of desperation he cut off the gas and dived at the searchlight. With every light out and engine stopped, he slid invisible and silent, till, at a low altitude, he poised above the projector and at one stroke released the bombs.

Broum! Broum! — Nothing more. — Darkness.

'Flagada! I guess I've put them to

sleep — what!' And he turned on the wing, gained the landing-place, and awaited the return of his friends.

They were not long in coming. Chignole, greatly excited, fell upon him. 'Heh, old boy! We've had the most fantastic adventure — you could never imagine. We were caught by a searchli —'

But Flagada interrupted him: 'No, no; let me off this time. You always have some tall yarn —'

'You mean to say you did n't see us? — A searchlight caught us, drowned us — then — all of a sudden — it went out. You saw nothing? — Papa Charles will bear me out.'

'No, nothing. Sweet evening for a débutant — what?'

And Flagada, walking at a tranquil pace toward the billets, rejoiced that his friends did not know they owed their lives to him.

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'Put up the busses. Run a flashlight over the engines. Ease up my rudder. — Fill her up for ten o'clock.'

The mechanics obeyed, and their dusky silhouettes stood out, huge, against the machines shining white under the moon. Papa Charles, seated on a can of petrol, was peeling off his leather suit. Chignole, in a brown study, scratched himself behind his ear, rubbed his nose — always signs of deep perplexity with him.

'Do we go bye-low?'

'What's struck you, you dumb old oyster? Have you swallowed the cuckoo's joy-stick?'

'The matter with me, Papa Charles, is that I don't like mysteries; and we are swimming up to our eyes in a mystery.'

'I don't get you.'

'You don't? Then I suppose you find it quite natural that the search-

light should suddenly let us go, at the very moment when it had us at its mercy?"

'Oh, well, something happened, of course; but I'm not going to make myself sick hunting for the wherefore of the why. Let's go to bed, that's what we need.'

Night! the limitless plain mingling with the sky; a convoy climbing the sunken road that runs along the plateau; axle-trees groaning, wheels creaking, horses neighing, men swearing. The hangars thrust their massive, regular profiles into the gray picture, their silvered roofs billowing in the wind. A few lights mark the village of Béhone; a ray of moonlight twinkles on the weathercock on its clock-tower. The big gun keeps up its steady hammering in the giant forge that flushes red on the horizon.

'Yesterday, little old Paris — day before yesterday, back from Nice,' murmured Chignole. 'To-day, apprenticed to death. — I'm not grousing; far from it! Still, I will confess, I was afraid to come back to the front. Yes, afraid of being afraid. I got rusty in hospital, and then I had a taste of a lot of amazing things I'd never known before — and it bored me to think of leaving all that. What can you expect! I'm no hero; I've never had the training and education that give a man the nerve to react properly to such experiences. It's not hard for you two fellows to be courageous. Often, I've watched you, Papa Charles; more than once, during a raid, it almost got your goat. But then, you were not alone: Chignole was behind you with his eye peeled, and you pulled yourself together and posed — for the public! The first time a fellow leaves home, he does n't mind; he's curious, like everybody else; he wants to see what war's like. Then he's wounded, and sent back to the rear; he stops there a bit, and then's

the time, old boy, when you suck the juice out of life and try all the fool things it has to offer. Me! I actually wept the first time I rode again in the Metro — and when I saw the waffle-woman at the corner of rue Coustou. Then, when you're sitting calmly at a little table on the Boulevard, with a glass of something cool in front of you, you find yourself thinking, "To-morrow I chuck all this." Well, old man, believe *me*, you feel as if your trousers were ripping up the back; and you're not happy about the way you'll break into the game when you get back to the front.'

Papa Charles turned round, took Chignole by the shoulders, studied him, tried to read his eyes, and exclaimed in a hoarse, troubled voice, 'Yes; it's true, Chignole; it's all true. But now that you're back — how do you feel?'

'Ah, good old top! It's better than it ever was. What a fool I was to dread it! How could I be such an idiot! Scare's all gone! Like a miracle! The instant I was in the bus — finished and done with! — everything else forgotten. It seemed to me I had always been a soldier, and would go on being one forever. The memory of the happy hours back there — *pftt* — gone! as at a wave of the wizard's wand. — "Vanish, little rabbit!" — Mama, Sophie, — perhaps it's silly, — but they hold only the second place in my thoughts, behind something I can't explain, something that overshadows all the rest. — Don't you know? — At midday, in full sunshine, what do you see? — The sun! — Nothing else. Well! just like that, my past dissolves, disappears, like the houses, the trees, the whole earth, under a dazzling light. Tell me what's the matter with me, Papa Charles.'

'I know — but there are n't any words for it. — *La Patrie* — France — the holy War —'

'Yes; I believe that we've had the luck to be born at the supreme moment to accomplish great things.'

They were silent, oppressed by an indefinable emotion. The wind dried the beads of sweat on their temples; the wind, that brings sick vapors from the furnaces of the battlefield, acrid odors of exploded shells and the stench of rotting flesh. Side by side they listened, deeply moved, to the voice of the great gun, now dull and distant, calling, calling them, as if it were the wounded earth that groaned.

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In the tent, they undressed quickly, for the dampness oozed through the canvas. Flagada was already sleeping peacefully.

'Well, I know I'm a bore, but the story of the searchlight is yet to be explained,' said Chignole, hitching up his suspenders with a characteristic gesture.

'It's certainly extraordinary that Flagada saw nothing.'

'Especially — come to think of it — as he was smiling when he answered our questions — a little as if he had a joke on us.'

'Well, why should n't he smile? There was nothing to cry about. Pshaw! We shall guess the riddle sooner or later, — more likely later. Douse the glim!'

Papa Charles slid shivering between the stiff, cold sheets. Chignole went to the table and took up the lamp.

'What am I stepping on? — Oh! Flagada's flight memorandum.'

'His flight-book? Pass it over! Let's see what he's put down about this evening's bombardment.'

Papa Charles turned the pages quickly, Chignole leaning over him with the light: —

'Bombardment behind the front,

Verdun. Duration: 3 hours, 10 minutes. Dropped six bombs on the Boche searchlight that was bothering my pals.'

They looked at each other with wet eyes. Flagada snored.

III. THE LIGHTNING-CHANGE ARTIST

'Get up, lazy-bones!'

'What! What is it?'

Flagada and Chignole, waking with a jump, stared bewildered at Papa Charles as he slipped off his helmet and rubber coat all shiny with rain.

'While you were snoozing, I took a taxi and sized up the weather. Clouds at one hundred metres. Nothing doing.'

'Nancy is n't far.'

'What if it is n't? We must see where we're going, just the same, when we skirt the St. Mihiel ridge. As for flying at one hundred metres — when I want to cut the grass, I don't take out a new machine. It's all very well to have dual ignition; I want to know all about it before I let myself in for its eccentricities.'

'So — we're expected to get up?'

'It would seem to be indicated. It's almost noon, and you run a strong risk of not finding a crumb at the mess.'

'We should worry! We'll blow ourselves in for a tip-top dinner this evening; we'll pull it off somehow, but I can't get up a thrill over it just this minute, Papa Charles,' yawned Chignole, trying to stretch himself awake. 'Golly, but I slept! and I had a peach-erino of a dream. I was sprouting wings. I soared! — I soared! — scattering all the little busses behind me as I flew.'

'Our Chignole as a rival of the Angel Gabriel — fine subject for a picture! Well, my children, I also dreamed.' Papa Charles fixed his eye on Flagada, but his voice was not quite steady. 'A very queer dream. I saw us, yesterday evening, caught in the searchlight,

blinded, done for, about to crash in a tail-spin. But a pal who was following us caught on to the situation. Despising cannon and machine-guns, indifferent to the possible smash, never stopping to count the cost, he shut off the engine and dropped down over the searchlight. And he placed his bombs so well that the horrible light was snuffed out — and we are alive. I ask you, Chignole, what you would call the fellow who would do that?’

Silence — Flagada concealing his embarrassment very clumsily and Chignole much affected.

‘I should call him a man in a thousand! I should call him Flagada!’ Then, as the latter tried to protest, ‘Hypocrite! Sly dog! You make me sick! I shan’t play with you any more.’

He leaped out of bed to hug his friend, while Papa Charles, who had got there first, gripped Flagada’s hands affectionately, saying, —

‘We have known one another only two days, and already we owe our lives to you. How can we ever pay our debt?’

‘By never mentioning it to me again — it is agreed — never to anyone.’ And Flagada began to pull on his socks.

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Down the muddy road they go, the road that leads from Béhone to Bar-le-Duc. Chignole, who is his own valet, has a horror of soiling his boots, and avoids the puddles with catlike agility, grumbling as he hops, —

‘This bath-water is sickening. I never saw so much rain. We sure have a grouch against the Weather Man for leaving the sluices open all the time. Still, it’s worse in the trenches, so don’t let’s whine.’

An imperative Klaxon warns them to get out of the way of a rapidly moving truck, which stops when it comes up with them.

‘*Will you come in?*’ cries the American chauffeur, in English.

‘*With pleasure,*’ replies Papa Charles, in the same language.

‘Anything for practice in the foreign tongues,’ murmurs Chignole, hoisting himself, along with his companions, into the car full of pilots of the American Escadrille. There are introductions, hearty claps on friendly shoulders, cordial greetings. Papa Charles converses; Flagada and Chignole offer their opinions freely. By the time they reach Bar-le-Duc they are all bosom friends, for Papa Charles has started the popular refrain, —

‘Take me in your arms and say you love me,’ —

which the Americans take up in chorus; and they cannot part until they have had several drinks all round.

‘My, but I’m hungry! I could relish a little snack of something.’ Chignole clicked his teeth suggestively.

‘I know where there’s a cake-shop; follow me,’ replied Flagada.

‘You know these diggings?’

‘Yes; I used to come here — before the war.’

The cake-shop. A customer leaning on the counter eating with gusto. Huge, lean, all legs, his long nose sticking out like a handle above his long neck, he recalls the picture of the heron in the fable. With entire calmness, methodically, without effort, he ingulfs quantities of cakes, expediting their disappearance with frequent potations of sweetened wine.

‘Have you any more frangipanes, dear madame?’ he asks the proprietress, with an agreeable smile.

‘Only one, monsieur.’

‘Excellent; that will make it come out just even. A dozen, is n’t it?’

He seizes the cake, gloats over it a moment, and in one bite it is gone.

Chignole has been staring with round eyes. ‘Will you take a look at our

brother over there! Where does he put it all? Thin as a breath of wind! Whew! He likes frangipanes — what! Can you imagine what machine he flies? Where does he find a cockpit big enough to stretch his spindle-shanks? Let's get out of here! He might mistake us for cream-cakes.'

Flagada leads them through the labyrinth of the streets.

'Where are you taking us?'

'To a café, — our kind, — Café des Oiseaux.'

A huge hall. The walls are lined with showcases, in which are displayed the stuffed birds that give the place its name.

'He knows the ropes, our friend. O Papa Charles, what do you call that bird with the big eyes?'

'A grand-duke.'

'I have my doubts. He doesn't seem at his ease. Heh! What's struck you, Flagada? Don't faint, what!'

'A poster! — A poster!' stammered Flagada, his eyes glued to an old faded programme that hangs against a partition.

'What does it say? — Grand Concert — June 15, 1914. — That's not to-day, unluckily. One of those nifty shows — I love that kind.'

Flagada underlined with his finger a name printed on the programme: —

PATAQUES

Lightning-Change Artist

'You know him, that barn-stormer?'

'Yes; that's to say — a little. — It's me.' He hesitated; then, brokenly, 'Yes; in civil life, that's what I am. A clown at three francs a ticket, performing in the provinces and at wedding breakfasts. Lightning-Change Artist! A tenth-rate sub-Max Dearly,¹ dragging his painted wretchedness and his

sinister gayety from one green-room to the next. If only I were sure I had talent! But there you are! Nothing is less certain. Now and then, not often, I was conscious of being bad enough to hiss; and there were times when the public confirmed my severe but just judgment of myself. I need only change my trade. — Quite true! Only — there you are again — I love the boards. My kind of fool is a fool for life. I'd sooner be a prompter or a property man than quit the stage. You see, your new companion is an acquisition. He's not commonplace — Lightning-Change Artist.' He laughed a forced laugh, mournfully, then sat down at a table and became lost in thought.

Enter a motorcyclist and runs to Papa Charles.

'The Chief of the Centre gave me this for you. A dispatch from G.H.Q. The reply to the request he telegraphed this morning, following your report.'

'Sshh!' Papa Charles went up to the poster and pinned the open dispatch on it. 'Flagada, — look here, old man.'

Under the name 'Pataques,' on the yellow page of the official telegram, they read, —

'Is cited in the order of the day: —

'X——, pilot in the escadrille V.B. — Under particularly dangerous circumstances, exposed himself of his own accord to save two of his companions who were about to succumb. Succeeded fully, thanks to his courage and coolness.'

Flagada trembled and tried to speak, but emotion choked him, and, to save the situation, Chignole babbled, —

'Since you love the theatre, behold, you have your reward!'

IV. AN AVIATIK RAID

The three friends were seated in one of the restaurants of Bar-le-Duc, where they had finally secured a table after

¹ The reader may here substitute the name of his favorite music-hall artist. — THE EDITORS.

interminable altercations, in the course of which promises alternated with threats.

'Oh, very well! believe it or not, as you please, the theatre has no more thrills for me.' Chignole, in difficulties with a bone from which he could not suck the marrow, paused a moment, then continued, 'The theatre! — It's nothing but lies; that's what disillusioned me. Still, when I was a kid, I adored it. But something happened that gave me cold feet. If you like, I'll tell you in five secs.'

'Anecdote!' smiled Papa Charles.

'Don't be too spiteful before a poor tyro; remember that I'm here,' Flagada murmured apprehensively.

'Well, here goes! I was somewhere about fourteen and I was working at the upper end of the rue de Belleville, in the rue des Envierges. Naturally, I used to go to the old theatre of the neighborhood, whose posters advertised the shadiest melodramas in letters of blood. And what fate decreed, befel swiftly.'

'You fell in love with a star.'

'It was my first offense. Yes; I became infatuated with the *ingénue*. Ah, my dear fellows! — Marvelous! — but she was marvelous! — One of those blondes —'

'Our Chignole already had a taste for blondes!'

'And then — as for talent — extraordinary! As Fanfan in "The Two Kids," she moved the whole house to tears, and Limace received every variety of abuse and vegetables. After having brooded long in my heart over this grand passion, I decided to unveil to her my secret soul.'

'In the words of Lagardère —'

'Don't interrupt. — I wrote her a letter carefully phrased. I might as well make a clean breast of it. I finished it this way: "You will easily recognize the admirer who will have

the honor to present to you his distinguished salutations at the end of the performance. During your great love-scene of the eleventh act, he will put his legs over the edge of the proscenium rail —"'

'Irresistible attitude!'

'At midnight, very much excited, quite upset, and almost ready to throw a fit, I turned my steps toward the green-room door, which I had so often eyed with longing. Issued forth: the young hero, a regular masher; the villain, sinister; the heavy father, venerable; the duenna, sweet as sugar; the financier, all importance; the soubrette, amiable; the machinists, noisy, and the prompter, negligible. Finally, there appeared a woman; the smoky argand lamp over the entrance lighted up her features only too well. I recognized my *ingénue*, but without wig, without make-up, unadorned, showing all her years. Oh, imagine the disaster! She might have been her mother — at the very least. I left, disgusted, and I have always held a grudge against the theatre for destroying my first illusion.'

They sat silent, each one haunted by the ghost of his vanished youth. It touched them lightly, wrapped them round, caressed them, then vanished like smoke. But even when it had vanished, they felt it still, for it had left its perfume.

Papa Charles was the first to shake off the spell.

'The bill — let's get a move on. We must be in bed early; the barometer is still going up. There's more than a chance that to-morrow morning the sky'll be clear; and in that case we'll breakfast at Nancy.'

Just as they were leaving the hotel, one of their neighbors at table said to them, 'You're going back to Béhone? Look out for aviatiks.'

'Aviatiks?'

'They're out almost every evening.'

Look sharp! They've no sense of humor.'

Flagada, astonished, was about to ask for fuller details, when Chignole murmured in his ear, —

'Keep your shirt on. He's a little fresh, that fellow. Aviatiks! To-night! What a crazy idea!'

They went down the avenue de la Gare at a brisk step. The night was clear.

'You see! I was right. The weather is fine; no clouds; a splendid night.'

'The moonlight flows down the steep blue roofs,' chanted Flagada.

'Halt!' cried Chignole suddenly.

'What's got you?'

'Down there in the square — a patrol — military caps, white brassards, police.'

'What of it?'

'You know very well we have no business in the streets at this hour.'

'Let's go back the way we came. We can go single file by the station — hide behind a tree — I think we can work it.'

'It would mean fifteen days arrest, if those little chaps caught us. And the Provost Marshal will make it thirty days, and the military governor will raise it to sixty. — That's the tariff.'

The two patrols, approaching each other, were about to bag their helpless victims, when an automobile came down a cross street toward them, at a smart pace. Papa Charles leaped to meet it, waving his cap desperately.

'Aviation!' he roared.

The car stopped.

'Comrade!' cried the chauffeur.

A pleasant voice issued from the lowered carriage-hood: 'Be so kind as to get in, gentlemen.'

The patrols came on at double-quick. 'Stop! Stop!'

But the chauffeur, by a clever turn, escaped the mounted police, and the motor lost itself in the labyrinth of narrow streets.

The excitement over, the three companions turned as one man to the unknown who had pulled them out of this scrape; but they could not make him out under the closed top.

'Thank your lucky stars — not me. I've just come back from escorting an officer of the flying squadron, one of my friends — and I'm fortunate to arrive at the psychological moment. A little more, and undoubtedly you'd have been taken prisoners by the aviatiks.'

'What's that you say?'

'Yes; that's our nickname here for the police, because of their frequent raids. We are often the victims, for your true policeman is without pity. It's an innocent title that hurts no one. — But pardon me, I had forgotten that I am not yet presented.'

He scratched a match, lifted his cap, and in the 'grand manner,' announced himself: —

'Vicomte Jean-Léon de La Guérynière.'

'Oh, the guy of the cake-shop, who ate cream-cakes by the dozen! Well, friend Vicomte, you sure have a stomach!' cried Chignole, tapping him on the belly.

And when Papa Charles voiced their gratitude, their new acquaintance protested, —

'What sort of a cad should I have been to act otherwise? In aviation we must stand by — the wings! We have to be good sports.'

'You're an observer, are n't you?' inquired Flagada.

'Yes; I'm here at the annex of the R.G.A., on the lookout for a good pilot. Up to now, I've had only make-believes, nuts who landed on their front wheels. You can understand — I am quite willing to be scattered to the four winds by the Germans, but by a pal — it's not a pleasant thought.'

'Well, Vicomte, I am looking for an observer. — My references? — Two

hundred and seventeen hours of flight, and yesterday evening an escapade of which these gentlemen have a rather exaggerated idea. Will you make a fourth at whist? Will you change our three-handed game into a *parti carré* — of aces?’

The Vicomte scratched another match and studied the faces of the trio. — ‘I’m your man. It’s a go!’

‘There’s just one hitch,’ began Chignole. ‘Each one of us has a fighting name. We must baptize the Vicomte. — I have it! We’ll call you Frangipane! — You don’t mind?’

‘Hurrah for Frangipane!’

‘And the Boches had better look out — the real ones, not the aviatiks.’

Four pairs of hands clasped.

*
* *

‘Red — it’s rather giddy — ’

‘Don’t you think gray would be more serviceable?’

‘Well — how about tricolor?’

‘Tricolor — there’s no need to proclaim it — we wear it on our hearts, *Mâme Bassinet*,’ her husband interposed sententiously, as he knocked his pipe lightly on his sole to expel the ashes.

Seated about the lamp, the three women were choosing worsteds to make a muffler.

‘Daisy stitch or Tunisian?’

‘Chatterboxes! Here it’s taken you an hour of talk to come to an agreement. Our Chignole’s knitting might have been half finished by now.’

‘Pull the latch, *Monsieur Bassinet*, don’t you hear the bell? — Ten o’clock. It’s old Fondu.’

A slim silhouette is framed in the square panes of the lodge door. There is a timid knock.

‘Come in, Fondu, come in, old boy.’

M. Fondu, in the employ of the City of Paris (Sewerage Department), replies to the invitation and creeps over to the stove. He is a slender little man, grotesque, of no particular age. He floats about in a great-coat of antique pattern which sweeps his heels. On his sharp knees he balances a stove-pipe hat, which, at the time of mobilization, made him the butt of the hoodlums of the neighborhood. He gazes complacently at his little-finger-nail, which he always keeps very long. He coughs, and murmurs, ‘And our aces? — Any news?’

‘Not yet. They only left yesterday morning. Besides, I have an idea they were going to stop off *en route* for a little spree. They’ve a jolly good right to it. The poor devils at the front must have their fun. They ought not to have anything to regret, if they should never come back — eh, Fondu?’

The old gentleman clucks, opens his mouth three times to speak, clucks again, and is silent. Sophie’s nimble crochet needle races along the stitches; Madame Bassinet and ‘Mama Chignole,’ wind off a skein; M. Bassinet sucks his pipe; M. Fondu contemplates his feet. Little by little a strange purring invades the silence.

‘Airplanes!’

With one bound they are at the window. Overhead, there are stars that leave their places in the sky and stray among the constellations.

‘The airplanes of the fortifications.’

The women, touched to silence by a common thought, draw close together, fearfully. The men shake their heads, subdued by the sense of their unimportance.

‘Ah, Fondu! We are nothing but useless old fools.’

(To be continued)

ENDING THE COAL DILEMMA

BY GEORGE H. CUSHING

I

MENTION coal in any public forum and two groups instantly go to grips. One is a very large group led by anyone who discusses any question in broad generalities. They will say, —

'America has four thousand billion tons of "soft," or bituminous, coal in reserve. It is using but six hundred million tons a year. In a hundred and ten years we have mined less than three tenths of one per cent of our store. There is plenty here and it is easy to get at. The shortage, then, is purely artificial.'

From these facts, they make obvious deductions — that the proper development of coal is artificially throttled, for example. Expanding the theme to a world-basis, they say, —

'The world has vastly more than eight thousand billion tons of coal. Nearly all of it lies north of the Equator. The intense suffering of the Allies for coal is wholly unnecessary.'

The other, much smaller group, led by men like the late Dr. Holmes of the Bureau of Mines, admit the probable accuracy of the statistical data but insist on a different interpretation. They say,

Probably the larger half of America's coal is west and south of the Missouri River, if the unmeasured reserves of Alaska are included. That, with transportation in its present state of development, means nothing to New York, Philadelphia, or Boston.

'Also, Illinois is the third largest coal-producing state. Yet its coal is of

such indifferent quality and is so difficult to manage in available furnaces, that little of it travels to market, even into the adjoining state of Indiana.

'For these reasons, the coal question is not solved by considering the quantities in the ground. It is, in both senses, a matter of availability — of being available at the point where it is needed and of being suitable for the desired purpose.'

Expanding the American illustration to cover the shortage among the Allies, this small group says, —

'Roughly the world-deposits are in America, Russia, China, Great Britain, Germany, France, Belgium, Japan, Australia, and some islands of the South Pacific. The deposits of China and Russia have never been developed. Japan, Australia, and the South Pacific islands are too far away. The coals of Germany, Belgium, and more than half of France were "bottled up" before December, 1914.'

These are but statements of known facts. The wealth of coal meant nothing. It was not available. The obvious truth was that the western Allies had to fall back upon the small, low-grade mines of central France and the coal-fields of Great Britain. That was the situation at the beginning of December, 1914.

That state of affairs placed Great Britain in this position. An army uses, on the average, close to ten tons of steel per man per annum. It requires, on the average, about five tons of coal to produce a ton of steel. That means

that, for each soldier in action, there must be produced, in round numbers, fifty tons of coal. In England, each miner produces about 350 tons of coal per annum. Therefore, one miner can supply the coal that will support seven soldiers. (In America we estimate that one miner can support about twenty soldiers, as each produces more than 1,000 tons a year.)

Great Britain did not know about this relation between soldiers and miners until a year of modern war had taught her how much her soldiers would need. She had had experience, however, in manœuvring her navy. The coal needs there were measured almost to the pound. Accordingly she commandeered enough coal for the navy, but made no specific reservation for the army. The records of the first year of war carry hardly a mention of coal-supply; and where it was bulletined as a need, the most general terms were used. Indeed, she was so hard pressed for fighters and so little impressed with the importance of coal, that she actually called miners to the colors. This reduced her coal-supply so quickly that she was forced early in 1915 to contract sharply her shipments to export markets.

Whether Great Britain or France realized it, is not material. The fact is that, whereas demand rose steadily as the army became larger and more active, the supply diminished quite steadily. Great Britain had, therefore, an acute and growing coal-shortage from the moment of her entrance into the war. Under all the circumstances surrounding the world's sources of coal, this western European shortage could be made good by America only. So, while both countries were blissfully ignorant of its existence, the coal-shortage grew in Great Britain and was transferred instantly to the broad and willing shoulders of America. Our coal-

problem, therefore, has been one which we assumed in Great Britain's behalf.

Everyone has been so easily deceived about the principal industrial problem of the Allies because no one has recognized it as a coal-shortage. Great Britain expressed it in another way, and believed that she expressed it precisely. She said that a ship of a given capacity can carry only so much freight per annum. With the number and capacity of ships limited, it would, she said, prove a waste of her most precious possession to carry five and a half tons of coal, a ton and two thirds of iron ore, and three quarters of a ton of silica sand, in order to make one ton of steel on British soil. If the steel itself were made abroad, the ships could carry more than seven times as much as could be made. So, concealed as a movement to conserve shipping, the coal-shortage of western Europe came bodily to America.

II

New England was among the first sections of America to manufacture munitions. It, sooner than any other section, began to work its factories full time, and then over-time. It, before any other district, began to invite in new workers. Therefore, it was first to feel the need of increased quantities of coal. It was the first place where the coal-shortage was felt. My records are conclusive that New England's coal-problem appeared about the middle of September, 1915.

A Richelieu, a Disraeli, or a Roosevelt sitting at the head of our State Department would have seen in the heavy buying of munitions something more than Britain's temporary unpreparedness for such a war. Especially when Lloyd George sent D. A. Thomas (later Lord Rhondda) to America to make long-time contracts for war-supplies, and to assure them even at the

cost of buying equipment for American factories, a far-seeing statesman would have realized that there was some grave and basic defect in Britain's capacity for war. He might even have analyzed back the coal-pile. Indeed, he could hardly have avoided it, since the coal-shortage in America, following so closely upon the placing of orders for munitions, had appeared in the centres where this work was heaviest. Unfortunately, the American premier, Mr. Bryan, was then in no mood to consider such things as the details of organization for war.

America was confronted at once by a stern fact with which she had to deal. Her factories had sold munitions and were manufacturing them. This called for increasing quantities of coal. As it was supplied, other users, working on goods to be used at home, began to feel the lack of coal. Even household supplies were endangered. America suddenly awoke to the fact that she was running short of the one commodity which had always been the most plentiful. The sudden transfer from too much to too little came as a distinct shock.

Western Europe was short of coal because it could not produce it. So it passed the burden to us. We too were short of coal, but could pass the burden to no one else, because we were the last resort of the world. Therefore, we must do the only thing that remained. We were forced to stimulate production. The conclusion is so obvious to everyone after three years of fumbling with the problem, that it may seem odd that our government did not at once begin to organize our mines to produce more coal.

There are two reasons why they disregarded repeated warnings and allowed coal to drift into a grave crisis. There was not in the government at that time any man sufficiently familiar with coal to recognize the gravity of the world-

situation. That is quite natural, since coal had never been considered an important commodity.

What goes deeper into our national programme is that it has never been any part of our national political scheme to stimulate in any definite way the production of anything. Whenever our political thought had dwelt upon business, it had concerned itself with other aspects of the subject. Our protective-tariff policy, which was our most pronounced expression of opinion about business, had to do almost solely with the price at which commodities should sell.

The indirect purpose was, of course, to stimulate industrial growth, but the primary object was to keep prices above the level charged by the outside world. The Sherman law took root in another phase of the price question. It aimed to keep competition alive, that prices thereby might gravitate to the level permitted by the tariff wall. Thus, while our whole business scheme presupposed production on a large scale, we sought to procure it by the price policy adopted rather than by any direct or specific stimulus to production itself. So, when the need to provide for more coal came, the required action was wholly outside the realm of organized political thought. To suggest a fixed objective or programme to any industry was something we had never done. On dozens of occasions, to have resorted to such a programme would have solved our most perplexing problems in the easiest way. But we had never deserted the beaten path to try the experiment.

Vistas of interesting possibilities are suggested by this contrast of methods. We have had for years a growing need of transportation. The steam railways upon which we relied were disposed to satisfy the demand only on their own terms. Our political leaders consented

to be drawn into a controversy over terms, when they could have solved the whole problem by a definite programme to stimulate other forms of transportation, such as electrically operated railways, barge-lines on our waterways, and motor-truck haulage on good roads.

Or, confronted by a problem in copper and other semi-precious metals, we might have encouraged the leaching process for the treatment of lean ores. Instead, our political leaders tried to whip the smelter combination into a mood to be reasonable. Again, confronted by an oil-problem, we might have stimulated by a clean-cut programme the production of oil from shales, or obtained refined oils from coal by-products, and so have served all purposes. Instead, our political leaders tried to whip the oil-refining company into a mood where it would act as the politicians desired.

The outstanding fact is that, since we had never tried so simple and so effective a remedy for any public ill, we were wholly without experience in stimulating production of anything by any fixed programme. Because our political thought moved in other grooves, no one in official life could see, in the world coal-situation, any need to do something wholly new. Or, if he did see it, no one had the courage to venture upon such an innovation as to try directly to stimulate output in orderly fashion. Still, when the world needed more coal, our clearly indicated line of action was to organize in order to produce it.

It is always interesting to inquire what any state could do in such a crisis. No act of Congress had designated any bureau to stimulate coal-production. If in an emergency any department or bureau should try to assume the leadership, it would have to contend with the jealousy of the others. Also, any

such assumption of power would be opposed by both coal-producers and coal-consumers. They would resent what they choose to call bureaucratic rule.

In such a crisis it would be equally difficult to find in any government the character of leadership which would be satisfactory to a majority. The United States Geological Survey and the Bureau of Mines are manned by scientists who by nature and habit work along lines which are fundamentally sound. It would take them some time to get started, and results would come slowly at first. Such a policy is possible in scientific bodies the personnel of which seldom changes.

The Federal Trade Commission, on the contrary, is essentially a political body, whose personnel is constantly shifting. No member's tenure of office has covered a sufficient length of time to allow him to understand any one of the dozens of industries under inquiry so thoroughly that he could formulate a sound programme for it.

If the scientific bureaus should adopt a slow-moving but sound programme, the Trade Commission could be relied upon to complain against the absence of quick results. On the contrary, if the Trade Commission should try to force a hastily devised programme on the country, the coal men and the scientific societies would prove it unsound.

This is precisely the dilemma in which the country found itself in the first stage of the coal-shortage — from September 15, 1915, to July 1, 1917. There was only one way out of it, and that was not adopted. The Department of Commerce has from its inception neither made enemies nor aroused suspicion. Many observers believe that, without precipitating bureau jealousies or disturbing business thought, this department might have called the transportation interests and

the coal-producers into conference and persuaded them voluntarily to work in harmony. But the opportunity was neglected.

By October, 1916, the shortage had spread from New England, to embrace the territory east of a line drawn north and south through Harrisburg, Pennsylvania. It was threatening even the Ohio and Mississippi valleys, as large quantities of coal from there were being moved into the east.

Although evidences of distress were coming from every city, and although, for lack of coal, the building of the Interstate Commerce Commission was closed for three days, Washington saw no need to take definite action. It was probably held back by fear of arousing bureaucratic jealousy, although it may have been awaiting some such indication of public interest as the spectacular 'preparedness parades,' which an effervescent public saw fit to organize to warn a complacent Congress that the country was in danger. At any rate, the country had to pass through a series of weird and ludicrous contortions before it could awaken Congress to the serious situation in coal. City officials conducted investigations, and in their reports advocated that municipalities own retail coal-yards. City newspapers printed lengthy tirades against all coal men, but in particular assailed the jobbers, whom they called speculators. County and state officials conducted lengthy public investigations, and in their reports advised governors to seize the mines. To one unfamiliar with American political methods this confusion of report and recommendation must have gone further than to show dense ignorance of a fundamental question, by hinting at the absence of any sensible directing force at the capital. As plain matter of fact, this was all part of the political game — the preliminary. Our democracy was

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merely informing its national representatives that our people were worried about coal.

III

When this uproar had continued for some six months, war with Germany was declared. Almost at once the Council of National Defense was created, and under it a committee on coal-production, headed by Mr. Francis S. Peabody. The suggestion, both of the committee and of its chairman, was made, undoubtedly, by Franklin K. Lane, the Secretary of the Interior. No politician except the head of that department, which contains two scientific bureaus, — the Geological Survey and the Bureau of Mines, — would have outlined the less spectacular but deadly accurate solution of a production committee. And no head of any other political department would have chosen as chairman of that committee the most conspicuous coal-producer of the country. And no head of any other department would have cut down the list of committee members until he had some twenty men, eighteen of whom were coal-producers with remarkable records.

The Lane-Peabody committee acted on the theory that, when there was enough coal for all, prices would adjust themselves. So it centred on production, and after three months' work was showing hopeful results.

Concurrently the Federal Trade Commission, under the authorization of Congress, was investigating the coal business. It paid attention mainly to the prices charged.

The clash between the two bodies was inevitable, with the outcome hardly in doubt. The production committee was working quietly on a programme which would bring prices down ultimately. The Commission was working somewhat noisily to bring prices down precipitately. The people were restive

under the prices charged, were suspicious of coal men anyway, and were openly in sympathy with the Trade Commission. This situation led to a fatal mistake by those who were trying to do the right thing. Rather than go to the people with a frank statement of their aims, Mr. Lane and Mr. Peabody decided to forestall the Commission, which was clamoring for price-fixing by law. To that end, they called the now notorious Lane-Peabody conference in Washington on June 26, 1917, to reduce coal prices by an understanding.

This gave the Trade Commission the very opportunity it wanted. It admitted that prices were wrong and could not be rectified by the programme then being followed. It made effective use of this tentative admission, and on the point of policy involved was able to cause a split even in the President's Cabinet. Mr. Baker and Mr. Daniels agreed with the Commission, taking a positive stand against Mr. Lane. This discredited the whole production theory among the people, by misinterpreting, if not indeed misstating, the facts about the price understanding. That is, the public was given to understand that the prices named were the final concession of coal men; whereas Mr. Lane and Mr. Peabody intended that they should serve only until production costs could be determined.

The downfall of the Peabody committee ended the first stage in the coal problem. It gave way to the price-fixing programme, which was the second stage, — from July 1, 1917, to about February 1, 1918, — and which, after a six months' trial, was commonly admitted to have failed.

If I speak plainly it must be remembered that I am dealing with a commodity which enters vitally into our war-programme, and am reciting incidents which must have their place in history. It may be unpleasant to speak with

candor, but if the truth is to be told there is no other way.

The Federal Trade Commission had a well defined ambition to control the coal-industry. Indeed, William B. Colver, now its chairman, and several of its employees had, while the Lane-Peabody conference was still sitting, appeared before a Senate committee to outline their plan of control. At about that time, Mr. Colver had persuaded Senator Pomerene of Ohio to present his plan to Congress as an amendment to the Lever bill then under consideration. It is now a part of that statute.

Senator Pomerene later went on record in letters to the effect that it was never intended by the Senate committee to allow the President to name the Fuel Administrator. The Senate agreement was that the Federal Trade Commission should be given control of coal by law. When the Senate committee plans miscarried and the President was, by accident as it were, given power to nominate, Mr. Colver became a candidate for the position.

The provisions of the Lever bill become important under the circumstances. They call, primarily, for rigid control of coal-prices, and, in certain eventualities, for the seizure of the mines. As an alternative, the President may buy all the coal at the mine mouth and resell it through his own agency.

Mr. Garfield, upon being named Fuel Administrator, inherited a scheme of fuel-control written into the statute books to fit the ambitions of the Trade Commission. He has never been allowed to express his personal preference for methods, and cannot do so to-day. He was compelled to obey the statute. This instructed him to fix prices, and allowed him to fashion a scheme of distribution. If it did not happen to fit the emergency, the President might seize the mines.

By disregarding production, and by

riveting attention on prices, the political thought of Washington was at least consistent. It expressed the same theory about production that it had in the Sherman law and tariff measures. This theory, voiced so often and so eloquently since, was in substance, 'If the price is right, the production will come.'

This time-honored and slightly threadbare theory might have worked automatically to increase coal-output, if the railroads had been able to carry more coal to market; if demand had not grown too rapidly; if labor had been abundant; if the mines could have bought and used all the machinery they needed; or if an experimenting fuel Administration had not killed mine-capacity and railroad-capacity with priority orders which bred congestion in all terminals. But no price was high enough to buy a way out of this confusion. The situation called for men who could think clearly and boldly. Mere money could not bring an automatic solution.

IV

In the whirl of confusing events which followed immediately upon the introduction of the Trade Commission's price-fixing plan, the need to stimulate production was lost to sight. All efforts in that direction stopped for nearly a full year. This was, perhaps, only natural under the circumstances. The politicians were in control, with tremendous powers in their hands. Coal men did not care to oppose them. Also there were, when war came, about four thousand coal-producing companies. The heads of some of them were ambitious. Mr. Peabody's committee, however, consisted of only twenty men, so the ambitions of all operators could not be satisfied, and some jealousies arose. In time there came such ill-feeling between those who were honored

and those who were ignored that, when the Peabody committee fell, its aims and ideals were buried ceremoniously with it. Since that committee had concentrated upon production, that subject became all but taboo in Washington high circles.

Thus it happened that we changed our coal-programme violently when the nation was at a critical stage in its war-preparations. Thus it happened, also, that we adopted a new and untried plan which brought on the crisis in January, when it was necessary to suspend all business for a period.

When it is recalled that our coal-shortage was borrowed from Great Britain, the event which precipitated that suspension order takes on a new and added significance. Some of the very munitions which England bought here because she did not have the coal to produce them at home, were, in January, on board ships at our Atlantic coast ports. The ships could not sail because they had no coal in their bunkers. However, an abundance of coal was at that time standing less than five miles from shore, locked in the congested railway yards. Great Britain was then preparing for the spring campaign. She needed those munitions, and was on the point of dispatching colliers to New York from South Wales carrying bunker coal. It would have proved a national disgrace if our ally had relied upon us for coal, and if we had failed to move it even to our own ports. Mr. Garfield decided to stop at nothing which would relieve those eastern ports so that the coal might get through to the waiting ships.

This congestion was the natural outcome of putting emphasis on distribution instead of production, and of trying overnight to destroy a distribution system which it had taken years to build, only to put something new and untried in its place. So the suspension

order served to prove to Mr. Garfield that the Federal Trade Commission plan was a dreary failure. He could not abandon it entirely because it was written in the law. But he could, and did, modify it radically.

The gradual return of the government to the production theory of Mr. Lane and Mr. Peabody constitutes what I call the third stage in the coal-problem. This new movement began about the end of February, 1918. It is progressing slowly — and somewhat clumsily — as I write. Mr. Garfield, informed frequently that transportation was the sole key to this complex coal situation, resolved to simplify it by limiting the movement of coal from any mine to what might be considered its natural market — to points, in other words, which required but a short rail-haul. His theory was and is that each group of coal mines shall become responsible for supplying the market immediately surrounding them. On this theory, he zoned the country. This was an attempt to increase production by trying to give the mines more cars to load. He believed that, if prices were attractive to operators and if cars were available, enough coal for everyone would be produced.

Our War Department, however, was then duplicating Great Britain's mistake of taking coal-miners into the army. It was decided to allow the draft law to operate impartially. If it took coal-miners along with clerks, it could not be avoided. We would get coal somehow. This did not work well. Indeed, Mr. Garfield's zoning plan was so beneficial to transportation, and the calling of miners to the colors was so destructive to mine-capacity, that the point was reached in spring and early summer where the railroads could carry more coal than the mines could produce. Still, on no day until the third week in July were shipments of coal

to market equal to the daily requirements under the Fuel Administration's budget.

Alarmed over the fact that the potential shortage was growing daily, the United States Fuel Administration and the National Coal Association concurrently in the first week in June appointed committees to expedite production. This incidentally was the first action, since the coal-problem became acute in September, 1915, which indicated that the politicians, the scientific bureaus, and the coal men had come to agree to anything as being the true keynote of the problem, and had concurred as to what was the right thing to do. It took us almost three years to bring this agreement. Still, the fact that the cure for a coal-shortage is more coal is so obvious, that it should have been recognized after even cursory study.

V

The whole trouble, I believe, arose because everyone underestimated the intricacies of the subject. Coal had been so abundant that nearly everyone thought little about it. Those who did study it formed no high opinion of the average man they found in it. Thus the opinion grew that the coal business was crude and easily understood. So little was known about its extent or complexities, in fact, that an official of a great corporation, national in scope, called me in one day to discuss with him, seriously, his proposal that his sales-organization take over, as a sideline, the distribution of all the coal of the nation. And, in the plan which it outlined to Congress, the Federal Trade Commission actually proposed that control of the railroads, the coal-mines, and the waterways be pooled under its jurisdiction. As an alternative, it proposed that all the coal should be bought by the government at the mine mouth, and

should be distributed through the Federal Trade Commission's office.

Such ridiculous proposals could spring only from dense ignorance of the complexities of any industry which enters so intimately as does the coal industry into every phase of our national life. It was ignorance of the fundamentals of coal — coupled with a failure to understand the new international significance of American coal — which led to most of the trouble and distress. Experiments and vast experience have now proved the falsities in the original conception. As our officials have come to understand the home situation fairly well, and to comprehend, after a fashion, the international coal-situation, the need to produce more coal is openly admitted. So the major part of our troubles now has been buried with our ignorance.

Having made so much progress, we must look to the future to see what still is in store. I told a Senate committee last January, and still believe, that our gravest danger lies in 1919. The production committees are, to-day, furiously at work. But being under political influence and domination, they are a bit spectacular. Old-fashioned stump speeches, with much 'flag-waving,' are made to the miners; half-sheet, full-sheet, and two-sheet posters, filled with political maxims and catch-phrases, are hung in the mining camps; and letters are written and dinners given to the operators. Indeed, all the hackneyed claptrap of a political campaign is employed to arouse 'interest.'

Meanwhile some solid business questions remain to be solved by cool thinking and courageous acting. I may put the matter in this way. If the miners who remain outside the army are to work, they must have tools in good repair. Yet, it took three months of vigorous campaigning to persuade the Priorities Board to surrender control

over mine-supplies to Mr. Garfield, that he might so organize distribution that repair parts would move expeditiously to the mines. As I write, the heads of Mr. Garfield's bureau have just been appointed.

If the miners are not available, their places must be taken by new machines or by an intensified use of the old ones. Nothing up to the date when this is written — August 1, 1918 — has been done, either to increase the supply of new machines or so to modify the rules of the miners' union as to allow constant use of the old ones.

If the machinery, finally, is to be supplied and utilized, either the old mines must be expanded or new ones must be opened. Nothing, to date, has been done along that line.

Finally, if the mines are fully manned and equipped mechanically to produce the needed coal, they must have arrangements for temporary storage of coal at the mines, to offset the irregular arrival of cars under the 'tipple.' The mines to-day have no such devices, and nothing is being done to provide them.

But, assuming that these matters are all attended to finally, it yet remains to provide cars and engines to carry that coal to market. It is safe to estimate that to keep the mines running requires fifteen times the number of cars that are required to hold the output of one day. That is, it takes each car, on the average, at least fifteen days to make the round trip from the mine to market. So the railroads must have and use fifteen cars for every car that the mines can load in a day. So far, this orderly adjustment of carrying capacity to needed coal output has not even been discussed.

Because of this complete lack of methodical preparation, I still believe that our worst coal experience will come in 1919. We can hardly hope to pass

through another disaster like that of last year without a sharp change away from the present form of coal-control. Therein lies even a greater danger than we now face. Already in Washington one hears much of an impending decision to seize the mines. Indeed, sentiment at present is setting so strongly in that direction, that it would seem to require but an insignificant clash of interests in coal and the government to precipitate that action. It may come at any time.

With what I believe to be at least a fair understanding of coal-mining, I venture to say that, if one tenth of the mistakes are made in operating the mines which were made when experi-

menting with distribution, we shall lose more production in six months than this nation can develop in six years. I say that understandingly. Mines are like bridges. Their strength lies in the observance of their engineering rules. Each mine has its own engineering problem. Unless worked according to its own engineering key, it will destroy itself very quickly. To tamper with the operation of these mines, without a thorough understanding of their engineering problems, is to invite disaster and to get results fatal to the American industry at the very moment when Great Britain, short of coal, is relying upon us for it. Indeed, if we do not supply it, no one else can.

THE DUTY TO DIG

BY DALLAS LORE SHARP

I

A YOUNG man sat by the roadside, milking. And as he milked, one drove up in her limousine and stopped and said unto him, —

‘Young man, why are you not at the front?’

The young man milked on, for that was the thing to do. Then, with still more slackers in her voice, the woman said a second time unto him, —

‘Young man, why are you not at the front?’

‘Because, ma’am, the milk is at this end,’ he answered.

And the chauffeur, throwing the clutch of the limousine into third speed ahead, drove off, thinking.

But the young man milking had already thought. To milk is to have thought. If ‘darning is premeditated poverty,’ then there is no saner occupation for human hands, none more thought-inducing, unless it be milking. Anyhow, when the Great War came on, I went over to a neighbor’s and bought a cow; I made me a new milking-stool with spread sturdy legs; and I sat down to face the situation calmly, where I might see it steadily and whole. I had tried the professorial chair; I had tried the editorial chair; I had even tried that Siege Perilous, the high-backed, soft-seated chair of plush behind the pulpit. I may never preach again; but if I do, it will be on condition that I sit on a three-legged milking stool instead

of on that upholstered pillowy throne of plush.

Whence then cometh wisdom? and where is the place of understanding? The flaming flambeaux on the Public Library say, 'The light is in here'; the Φ B K key in the middle of the professorial waistcoat says, 'It is in here.' But I say, let the flambeaux be replaced by round-headed stocking-darners, as the sign of premeditated poverty; and the dangling key by a miniature milking-stool, as the symbol of the wisdom that knows which end of a cow to milk.

Not one of those students in the University who earned Φ B K last year knew how to milk, and only a few, I believe, of their professors. One of these, with a Ph.D. from Germany, whose key had charmed his students across their whole college course, asked me what breed of cattle heifers were. Might not his teaching have been quite as practical, had there dangled from his watch-chain those four years, not this key to the catacombs of knowledge, but a little jeweled milking-stool?

I too might wear a key, especially as I came innocently by mine, having had one *thrust* upon me; still, as I was born on a farm, and grew up in the fields, and am likely to end my days as I have lived them, here in the woods, this Φ B K key does not fit the lock to the door of knowledge that life has opened to me.

I have read a little on the aorist tense, and on the Ygdrasyl tree; a little, I say, on many things, from the animal aardvark, here and there, to zythum, a soft drink of the ancient Egyptians, picking a few rusty locks with this skeleton key; but the doors that open wide at my approach are those to my house, my barn, and the unwithholding fields. I know the road home, clear to the end; I know profoundly to come in when it rains; and I move with abso-

lute certainty to the right end of the cow when it is time to milk.

I am aware of a certain arrogance in this, a show of pride, and that unbottomed pomp of those who wear Φ B K dangling at their vests, as if I could milk *any* cow, or as if I might have in my barn the world's champion cow for butter fats. I have only a grade Jersey in my barn; and as for milking heifers with their first calves — I *have* milked them, but the boys must break in this one that we are raising for the war. Perhaps I am no longer entitled to wear a milking-stool at the watch-chain over my slowly expanding waistcoat. Breaking in a heifer is really a young man's job.

So I find myself at the middle of my years, stripped of outward signs, as I hope I am inwardly purged, of all vain shows of wisdom (quite too humble, truly!), falling in as naturally as the birds with the daylight-saving plan, and eating 'substitutes' as I have always eaten them, only refusing to call them by any such libelous name.

War cannot change the way of things here. It may take my four sons. I had hoped they might be farmers and servants of the public good. In my scheme of things there are no soldiers, although my four sons, nevertheless, have been trained to shoot and to dig themselves in, and are marching straight against some four German lads, if this war lasts long enough. And may God have mercy on the four Boches! But if they come back from the war, my four will come back here, or somewhere, to the hoe and the milking-stool. They have drunk deep of warm milk, and will never know another thirst so wholesome and so sweet to slake.

War has come, but my garden goes on as it has gone on these fifteen summers — there is a little more of it now, that is all, with a little larger yield of

its reasonableness and joy and beans. I have not had to plough up my front lawn, because years ago I provided myself with a backyard and got it into tilth, keeping the front lawn green for the cow. While only a grade Jersey, as I said, the cow is a pretty creature, and just rural enough to give a quiet ruminant touch to our approach, as lilacs would and hens, were we not obliged to keep the hens shut up on account of foxes. Staked here on the front lawn, the cow suggests war-time economy too. Thus tied, she is more than a wagon hitched to a star: for the gods not only do my mowing, but gather up and cure my hay, and turn the clippings into cream. And such cream!

Every cow, of course, gives some skim milk. Mine gives a little, which we need for the chickens, for cooking, and cottage cheese. Life is not all cream, even here. If I speak of gods doing my chores, I will say that they do not milk for me in the mornings, and that it is one of the boys who milks at night. A cow clipping your lawn is poetry and cream too, but it is often skim milk and prose to care for the creature. Milking ought to be done regularly. Get a cow and you find her cud a kind of pendulum to all creation, the time to milk being synchronized twice daily to the stars.

I did not plant war-potatoes on my front lawn, partly because they would not grow there, and partly because, in times of peace, I had prepared for war-potatoes; and partly because I think a front lawn looks better as a lawn than as a potato patch. If thou shouldst

So live, that when thy summons comes to join
The innumerable caravan . . .
Thou go not, like the quarry-slave at night,
Scourged to his dungeon,

should we not all live so that, when war comes, we need not plough up the beds for potatoes, where the portulaca and poppy ought to blow?

This sounds as if I believed in universal military training. The idea is hateful to me, even for six months of one year of a man's lifetime, being tantamount to war. Universal military training is Prussian, it is Bernhardi-Bernsdorff - Hindenburg - Ludendorff - Von Tirpitz - the Crown Prince - the Kaiser. Spelled that way, it sounds German and un-American. A country full of gardens is not the same as a country full of camps. If I say, in times of peace grow plenty of potatoes, it is because it takes longer to train a gardener than a soldier, to develop a garden than build a camp; and because a garden is an excellent place in which to train for the camp, digging, as in the garden, having become one of the essential ways of war, while at the same time it is the fit preparation for the ways of peace. To get your digging in a camp, however, is to leave the potatoes out of the training and learn only the ways of war.

This war was a shock to me, an awful event for which I was unprepared. But not so unprepared as Mr. Price Collier, who, in his book, *'Germany and the Germans,'* published in 1913, says of the German army, —

It is the best all-round democratic university in the world; it is a necessary antidote for the physical lethargy of the German race; it is essential to discipline; it is a cement for holding Germany together; it gives a much-worried and many-times-beaten people confidence; the poverty of the great bulk of its officers keeps the level of social expenditure on a sensible scale; it offers a brilliant example, in a material age, of men scorning ease for the service of their country; it keeps the peace in Europe; and until there is a second coming of a Christ of pity and patience and peace, it is as good a substitute for that far-off divine event as puzzled man has to offer.

Only an honest believer in universal military training, like the Reverend

Mr. Collier or Colonel Roosevelt or General Wood, could have been unprepared to the extent of saying of the German army, 'It is the best all-around democratic university in the world . . . it keeps the peace in Europe . . . and until there is a second coming of a Christ of pity and patience and peace, it is as good a substitute for that far-off divine event as puzzled man has to offer.'

G-r-r-r-r!

I grab a grub-hoe, rush out behind the barn, and attack the earth, the stone walls—anything to calm myself when the universal trainers begin to talk.

No, I was never so unprepared for this war as was Brother Collier, for I have never been able to look at a soldier without thinking, 'How ready he is for war! readier in mind and temper even than in his gear!' I should like to see ten million American boys in uniform to-day; but when this war is over, and militarism killed in Germany, I wish to see every American boy ordered for six months to his backyard garden or the farm, there to dig under as compost the militarism that those who believe in war, and those who profit by war, would set up in America in place of the German machine.

II

Instead of universal military training, I would advocate a hive of bees for everybody, or a backyard garden. A house should have both lawn and garden, even though the gooseberries crowd the house out to the roadside, where the human house instinctively edges to see the neighbors in their new pony-coats go by. Let my front door stand open; while over the back stoop the old-fashioned roses and the grapevines draw a screen. It is between the front yard and back yard that my

privet hedge shall run, behind which, as within the veil of some Holy of Holies, only the anointed of my friends, those who keep bees and go a-gardening, may enter. We shall always face a famine, a potato-panic at least, so long as our dooryards are all lawn in front and all garbage-can behind. We have farmers enough, — one to every eight of our population, I believe, — who might produce sufficient raw potatoes; but Aroostook County is barely contiguous to the United States, and such a barrage of frost was laid down across its borders this last winter that, if one brought potatoes out of Aroostook between December and March, he had to bear them in his bosom.

Aroostook County is the greatest potato patch in the world; the American imagination loves to hover over the tubered tracts of Aroostook, the *richest* county in the world; loves to feel that, not Boston only, but the rest of Ireland, could be fed from Aroostook, were it not for the triple alliance of the cold and the contiguity and a railroad that runs, if not like a broken tooth, then like a foot out of joint, into these remote dreamlands of Maine.

Woe to them that go down to the railroads for help; and stay on engines and trust in empties, because they are many; and in officials, because they are very strong. This country is too big for the railroads; so big that every house has room for a backyard, and has need to turn it into a garden, in order to save the railroads and break the potato combine in Aroostook County.

Let two or three potato-growers get together in Aroostook County, or beef-packers in Chicago, or profiteers anywhere, and a combine is sure to be in their midst. I have not had a potato from Maine this year, or a pound of beef from Chicago. I could have got on without a pound of sugar from Cuba, had I looked more carefully after my

bees last summer. I do not mean that I can handle the Beef Trust and the potato pirates and the sugar barons with my humble hoe; or snap my fingers in the face of Standard Oil, and say, 'Go to, I'll have none of your 28-cent gas!' But I do say that several million bee-keepers and potato-patchers, and hen-coopers, keeping busy in their backyards, as I keep busy in mine, could mightily relieve the railroad congestion, and save gasoline, and cut in on the demand for Chicago beef and cold-storage eggs, and generally lower the high cost of living, to say nothing of helping to win the war.

There is this war-use for the backyard surely; but there are older, peace-reasons for the garden, both economic and moral, that we Americans do not fully understand. We are overgiven to front lawns. We know neither the economics nor the quiet joys of dwarf fruit trees, and asparagus, and hens. Economy as a moral principle, and productivity as a personal adornment, are strange doctrines to our ears. Our First Commandment is to make money; our Second is to spend it; and if there are any other commandments in our Law and Prophets, they are to make and spend still more money — freely; but not to spend much of it on the backyard. We are not more eager for money than other nations: we only make it more easily, so easily that one of our junkmen died last week worth a million; and so freely do we spend, that to-day's papers report a lawsuit between two brothers, who do a hat-checking business in New York hotels, asking the courts to divide for them their half-million-dollar pile of tips!

I know of a young man who has made five and one-half millions in shoes and *stocks* since the war began, while I have made, among other things, 500 cabbage-heads grow in my garden. Which of us has really added to the

wealth of the world, he by picking up stocks on the Curb, or I by digging cabbages out of the soil? He gave a million dollars, I hope, to the starving Belgians; I gave what I had — the surplus cabbages; and while there is little substance to be found in a cabbage, still you can live longer on it, if you happen to be starving, than you can on Wall Street stocks, even when the market is strong.

Wealth is not created, not even increased, in trade. When was one pennyweight of gold on 'change by any magic metallurgy of trade made two pennyweight? The magic of the second pennyweight is the metallurgy of the pick and shovel and cradle rocking the shining sands of the Yukon. Real wealth is circulated only in trade. It comes from primal sources — from the gold-fields, the cotton-fields, the corn-fields, the fir-clad sides of Katahdin, the wide gray waters of the Grand Banks, the high valleys of the sheeped Sierras, and from backyards, like mine, that bring forth thirty- and sixty- and an hundred-fold.

Those who produce wealth seldom possess it, the work with hoe and axe and drill and trawl being too elemental, too human and limited for that. One must handle money and not tools, to get rich; but though a man employ a million men, he does not by that produce a man or the value of a man, the world owing that debt to a mother. She produces the man; and once produced, he is absolutely nothing but a charge on the universe, except he in turn produce something, not make it — if it be only a bunch of beets.

We need the butcher, the baker, the candlestick-maker; and, of course, the banker to stay by their stuff; we need the policeman to stay by the banker, the prosecuting attorney for the butcher, the inspector for the baker, the tax-collector for the candlestick-maker;

and for them all, the barber, the confessor, and the undertaker. We even need the college professor — at Washington. Society is an organism, somewhat complex, with the farmer at one end, the garbage-collector at the other end, and in between a middle-man, for whom the whole body is fitly joined together; by whom each coördinating factor functions; and to whom every component part and mutually dependent organ is made vitally subservient, that there should be no schism in the body, but that the members should have the same care one for another!

The analogy might be carried further, to find society an organism in process of evolution — evolution so swift that millions of its members are left merely ornamental and idle, like the pineal gland and the vermiform appendix, society's great affliction. But it is not of the idle I am thinking; nor of any other one class; nor yet of all the classes as one; for, if they were all *one* member, says Saint Paul, where were the body? For the body is not one member, but many. We cannot all be farmers, but can we not all be gardeners? or nearly all? Cannot everybody produce some wealth, — two blades of grass for one, — and earn his salt, say, by *evaporating* it?

The food-problem before the community is not a problem of eating — of saving and substituting: it is a problem of wasting a great deal less and growing a great deal more — not more potatoes in Maine, or more beans in Michigan, but more in Hingham, where there are a few backyards quite fit for potatoes, and many yards that will produce beans. Almost any garden is good for beans, and almost any gardener. Yet beans this spring are about two for a cent!

It is not because there are 'millions in it' that I would have the banker plant his backyard to beans. Thoreau plant-

ed two acres and a half to beans and potatoes (on a weak market, however), with a 'pecuniary profit of \$8.71½.' Here is no very great financial inducement to a busy banker, or to a ward boss. Still, who better than the ward boss or the banker could afford a private beanfield?

One should pay one's way in this world, as I presume a State Street broker thinks he does, who said to me that the price of flour never troubled him. And one should have pleasure in paying one's way, too, for there are pleasures in gardening as there are in fishing, unless one has been spoiled for them by playing the stock market, or running a railroad, or otherwise helping God manage this 'automatic basement' of his great department store. The number of indispensable men nowadays, men too big for beans, though a natural development of social conditions, is a menace, a grave menace to society. A place in the sun for himself and his bean-patch is room and verge enough for one's ambitions; and an exchange of seeds and garden lore over the back fence quite as far as one needs to push one's Kultur.

III

It is not chiefly the pleasures of gardening, however, nor yet the profits of gardening chiefly, that I am writing about, real as these are and inseparable from the duty to dig — which is my theme. There are those who doubt the wisdom of digging because things can be bought cheaper at the store; and those who question their right to dig when they can hire a man to dig for them; and there are those who hate to dig, who condemn duty, who, if they plant, will plant a piece of fallow land with golf-balls only, and hoe it with brassies, niblicks, cleeks, and spooners, saying with Chaucer's Monk, —

. . . how shall the world be served?
 Let Austyn have his swynk to him reserved.

Golf is an ancient game, no doubt, but not so old as gardening, though golf's primordial club and vocabulary seem like things long left over, bits of that Missing-Link Period between our arboreal and cave-day past. Except for calling the cows from the meadow, or fighting in war, there is nothing we do that requires words and weapons, tools, instruments, implements, utensils, apparatus, machinery, or mechanisms so lacking in character and comeliness as the words and clubs of golf. The gurglings of infants seem articulate, even to unparental ears, compared with the jargon of golf; and as for billiard-cues, baseball-bats, pikes, spades, shillalys, and teething-rings, they have the touch of poetry on them; whereas the golf-club was conceived and shaped in utter unimaginativeness.

Golf is not an ancient game: it has the mark of the Machine upon it; the Preadamites could not have figured the game out. Gardening, on the other hand, if we trust Holy Writ, was an institution founded before the Fall, incorporated with the social order from the start — an inherent, essential element in the constitution of human things, —

Great nature's *primal* course,
 Chief nourisher in life's feast, —

which civilization doth murder as Macbeth murdered sleep.

Golf belongs to civilization strictly, not to the human race, being one of life's post-Edenic precautions, like psychopathic hospitals, jails, and homes for the feeble-minded. A golf course is a little-wanderers' home; and if we must have golf courses, let their hazards be carefully constructed on worthless land, and let the Civil Service Board examine the caddies, whether they be fit guards for the golfers, lest some small

boy be wasted who might have tended real sheep on Norfolk Downs or have weeded in a garden.

It is a duty to dig, to nail the Stars and Stripes to a lima-bean pole, and plant the banner square in the middle of the garden. Profits? pleasures? Both sorts will grow, especially the pleasures, which really are part of the profits, till they fairly smother the weeds; not the least of these being a sense of your right to live, which comes out of actually hoeing your own row — a literal row of beans or corn or tomatoes.

Somebody must feed the soldiers; but nobody must needs feed me. It is not necessary that I live, however necessary I find it to eat; eating, like sleeping and breathing and keeping warm, being strictly a private enterprise that nobody but I need see as necessary or be responsible for.

The soldier must carry a shovel nowadays, but he will require a hoe, too, and a pruning-hook, and a ploughshare, before he will be self-supporting. With such a kit war could support war forever, which is the Rathenau plan of war, with everything German left out, consequently everything of war left out. The soldier cannot feed himself. The crew of a battleship cannot be expected to catch their own cod and flounders. They must leave that to the trawlers, those human boats, with human crews who fish for a living. Men of the navy must die for a living. The captain of a U.S. destroyer, writing to his wife, says, 'I think that the only real anxiety is lest we may not get into the big game at all. I do not think that any of us are bloodthirsty or desirous of glory or advancement, but we have to justify our existence.'

So does every human being; yet an existence that can be justified only by fighting and dying is too unproductive, too far from self-supporting, to warrant the sure calling and election of

many of us. No Grand-Banker ever wrote so to his wife, though he might be returning with all his salt unwet; no college professor ever wrote so, — not if he could get into his garden, — in spite of his pupils, his college president, the trustees, and Mr. Carnegie's Efficiency Board. Teaching may not justify a professor's existence, though it ought to justify his salary; so, every time I start for the University, I put a dozen or two eggs into my book-bag, that I may have a right to the tree of life, and may enter in through the gates into the city.

I am not independent of society. I do not wish to be independent. I wish to be debtor to all and have all debtors to me. If I ask bread of the farmer, I would not give him in return a stone. He is the last man to want a stone. Yet that is what society gives him for his wheat — the farmer, I say, not the elevator-man; society pays the elevator-man handsomely for the farmer's wheat. I owe the farmer more than money. I owe him what any beggar on the street owes me. And here is a nation to-day begging the farmer for a hand-out — panhandling the farmer, a whole world panhandling the farmer for something to eat!

What is the matter with society that this should come to pass? Nothing much, except war and business and the standards they set for society. The trouble with war is that it is business; and the trouble with business is that it is war; and the trouble with society is that its standards are those of war and business. Society is militant; the Hun is human; and the abhorrent philosophy that he casts into great guns at Essen seems to shape everything down to the American hoe and toothpick. The people who make hoes make war on me; and every time I buy a hoe, I pay so much more for it than I ought, that I would like to use it first on its

manufacturers, hoeing them up as I do the other weeds in my garden. And I am a Quaker, too! In spite of the price, I must buy my hoe, and I wish to buy it; for here on my farm I cannot make or raise hoes. But we buy too much and sell too much of life, and raise too little. We *pay* for all we get. Sometimes we get all we pay for, but not often; and if we never did, still life has so thoroughly adopted the business standard, that we had rather keep on paying than trying to grow our way.

Let the farmer grow his way; and if his existence can be justified, it will be in feeding us. 'All naval officers ought really to get killed to justify their existence,' writes the naval officer quoted above; wherein, for a moment, the officer's existence approaches that of the farmer, dying and farming being alike in that they are too personal and elemental to be done by proxy, the farmer, unlike the officer, dying all day long.

Business is a way of living by proxy; money is society's proxy for every sort of implement and tool. To produce something, however, — some actual wealth, a pennyweight of gold-dust, a pound of honey, a dozen eggs, a book, a boy, a bunch of beets; some real wealth out of the soil, out of my loins, out of my brains, out of my muscles and the sap of the maple, the rains and sunshine and the soil, out of the rich veins of the earth or the swarming waters of the sea — this is to be; and to be myself, and not a proxy, is to lose my life and save it, and to justify my existence.

I have to buy a multitude of things — transportation, coal, dentistry, news, flour, and clothes. I have paid in money for them. I have also paid in real wealth, having given, to balance my charge on society, an equivalent in raw cabbage, pure honey, fresh eggs, and the like, from my own created store. I am doubtless in debt to society, but I

have tried to give wealth for wealth, not the symbol of it merely; and last year, as I balanced my books, I think the world was in debt to me by several bunches of beets.

I do not boast of the beets, though they take me out of the debtor's prison where most of us live. I can face the world, however, with those beets; I have gone over the top, have done my bit, with beets. I subscribed to the Liberty Loans — one, two, three — and wear my buttons proudly. If I have any money my country needs, she can have it — all of it, gladly, easily; the difficult thing to give her is beets. They make you hurt all down your back, and make you sweat (which is good for the kidneys); for, as Kipling might put it, money is only money, but a bunch of beets is the beginning for a good New England boiled dinner.

The local food-administrator has just sent me a gardening blank, to be filled out with information, 'confidential and solely for the authentic knowledge of those who are compiling the food possibilities of Plymouth County and the state as a war-measure.' I wish the food-administrator had been the *Atlantic* editor, that I might boldly tell of all the things we grew here last year, from the calf to the canteloupes, from the asparagus of April around the months, summer and winter, with a garden and vegetable-cellar just like a seed-catalogue incarnated — with peaches, plums, apples, and straw-

berries-and-cream! My oldest boy *cleared* \$136 on his chickens, besides raising his heart-full of bantams, and getting a first prize of twenty-five cents for one bantam pullet at the Hingham agricultural fair! Our winter beans were a comparative failure, but we shall sit down to our own pork and beans every Saturday night this next year, or I am no gardener.

How do I get time for all of this? To be sure, I was a trifle forehanded and got me a family of boys to start with; and of course, a college professor, whatever you say of his salary, does have some advantages over the business man in the way of vacations; so that my situation perhaps is not quite typical. I do more than the average man can. But I love to do it, and the boys love to do it; and what a man loves to do he will find the place and the time for.

Give me a garden and the wages of hoeing my row. And if not a garden, then a little house of hens, a coop of pigeons, a colony of bees — even in the city I should keep bees, if I had to keep them in the attic or on the roof. Not every one can have a garden, but every one can either plant a tree, or raise one pig, or keep a cow or goat, or feed a few hens, or raise a flock of pigeons, or do something that will bring him personally into contact with real things, and make it possible for him to help pay his way with real wealth, and in part, at least, to justify his existence.

TRIBUS GERMANICUS

PERSONAL EXPERIENCES WITH TRIBAL PSYCHOLOGY

BY PHILIP HEMENWAY CHADBOURN

I

It was one of those rare days in June when the subtlety of the last urge of spring and the first effulgence of summer, blended and borne softly through the open windows, went to my head like wine. The ugly walls of the school-room blurred before my eyes. I seemed to hear in the drone of the children's voices the sound of a brook I was planning to explore after the school-bell rang for the last time.

I remember that I had my big geography propped up, and in its shelter I was drawing plans of a duck-boat that spelled untold adventure for me. My fancy took me far afield, for these schemes for camping and hunting were the obsession of my days and the dream-stuff of my nights.

In the midst of my feverish reveries I gradually became aware of a thin small voice far away, for all the world like the voices in old-fashioned phonographs. But the small voice was insistent; it grew stronger as it raced over the leagues that my fancy had put between the teacher and myself; it finally burst in upon my consciousness with a clamor, and I found myself the object of my teacher's withering glance while the tittering of the boys near me increased my confusion.

'Are you aware, Philip, that the second form has commenced its geography recitation?'

I stammered acknowledgment of the fact implicit in her question.

'What people is to-day's lesson about?' she continued.

As I hung my head in ignorance, my eyes fell upon my geography, still open and shielding my precious duck-boat. In that moment of imminent failure I noticed the right-hand page, a map,—a sprawling thing in sickly green,—and printed in large letters, the legend, 'Germany.'

'The Germans,' I blurted, grasping at any straw.

But with those eyes still leveled mercilessly upon me, I saw that I was not to be let off thus easily.

'Tell me what you have learned about the German people,' came the second question, in a soft even voice.

I felt the way a thoughtless wild thing in a trap must feel; those velvety tones fell upon my ears like the soft measured tread of the trapper, soft with alertness, measured because confident of his prey.

Thinking hard and fast, I suddenly remembered a text from a recent lesson in my copy-book. In that moment of trial that text came back. It diffused a warmth of confidence in me like the bright light which fell about the stricken stag in the miracle story, and saved it from the huntsman's fatal thrust. So I repeated boldly and word for word that which I had written over and over in my copy-book:—

'The German people are a strong race, obedient, industrious, and filled with national pride.'

The years rolled by; the schoolhouse, the duck-boat, were all but forgotten in the busy scramble of early manhood. But still, on looking back, I can remember that, when my schooling was finished and I set out to earn my living, my concept of the world at large and of its peoples amounted to little more than the epigrammatic phrases in my old copy-book. I recall, too, that nearly all my contemporaries shared my own hazy detached ideas about what lay beyond the borders of 'these United States.' But the time came when I felt impelled to push out my horizons. I 'kicked over the traces,' quit my job, and started off with a slender purse of savings and a knapsack on my back, 'the world for to see.'

The steamer on which I was a steerage passenger, ran aground in Kaiser Wilhelm Canal, near Kiel. It was a Russian ship, bound from London to old St. Petersburg, in the summer of 1913. Our pilot had given too wide a berth to one of the Sunday excursion steamers, and he put our ship fast on a bank of ooze.

While a bevy of tugs tried vainly to pull the Tsarevitch Alexi off, some of the passengers were taken in a launch to a suburban park, where a regular ferry-boat connected with the city. I remember sitting on the top deck, opposite a row of chattering schoolgirls in their 'teens. As soon as they heard me address a fellow passenger in English, they began talking about me, and went into gales of laughter over my clothes. I could appreciate their ridicule, because my tramp through Holland and England, sleeping one night in a box-car and the next in a hay-mow, had doubtless made me look like a scarecrow. So I smiled back at the young

ladies debonairly, admitting that I appreciated the joke.

When we landed at Kiel I was among the last to get off. Imagine my surprise, while crossing the gangway, to hear these German girls, freed from the confines of the ferry-boat, pointing at me and yelling, 'English swine, English swine!'

II

I left the Germans to their vaulting pride in themselves and contempt for others, and sojourned among more lovable folk. The Russians took me to their heart, and made of me a son in their midst. Never extolling the great attributes of their race, — perhaps unconscious of them, — they would enumerate their faults with charming naïveté, and ask with childlike simplicity if Americans were as bad as they. I slept in their rude huts, and sometimes broke the last crust of bread; but when I went on my way, they clasped me in their arms, men, women, and children alike, and kissed me on both cheeks.

Even among the Kurds, those mongrel waifs who live by brigandage, I fared well. Disarming their acquisitiveness by my poverty, I found them very human. Ignorant beyond words, and heirs to a bigoted religion, still they were less tribal in their thought than I had imagined. Coming among them as a friend, with no ulterior motive, I was received by them as such. Even when a Turkish garrison, sent to extort taxes from their wild Kurdistan, arrested me for a Russian spy, a Kurdish chieftain interceded for me. He succeeded in getting permission from the military to keep me as his guest. While being fêted by several chiefs in turn, my Turkish guards ate what was left from our feasts, in a courtyard with the horses and mules. When we parted company, my host gave me his prayer-rug, his precious pipe, a pair of stirrups,

some metal plates and carved spoons, to show my American tribe-fellows what the Kurds could make in return for the coveted automatic revolvers which we send to them.

Pressing ever farther afield, I came in time to the Arabs. Among the nomadic tribes I found a kind of democracy that I had heard of before only in fairy tales. I have sat cross-legged with an Arab chief, an aristocrat by blood and wearer of the revered green turban, sign of his lineal descent from Mohammed. Sitting with us in a circle around a common tray of food were negroes from Nubia, coreligionists of the Arabs and black enough to put ebony to shame. Here I found the same naïveté as among the Russians, the same readiness to regard human accomplishment as well as human shortcomings as a sort of inter-racial fund from which we all draw, each nation lending to its acts the color and characteristics of its peculiar genius. An Arab would never think of holding us Americans in contempt because, as a people, we lack what Bergson calls the sixth or 'transcendental' sense. Forgetting that he excelled us in that sphere, he would be lost in admiration of our pragmatic mind, which grapples so successfully with the problems of the physical world. But when we, emboldened by success in our material field, would with carnal senses enter the realm of metaphysics and hitch our wagon to a rational god, our Arab friend has to cover his gleaming smile with a thin brown hand.

I recall a delicious dig that one old patriarch got off on me. He turned the catechetical conversation to religion, favorite topic in Arabia. Noting my increasing discomfort, he finally gave me his *coup de grâce*. He said, 'Why do your countrymen send missionaries these thousands of miles to persuade us of the divinity of that saint, Christ, be-

fore they have even convinced the chief of your own great land?'

This subtle reference to our Unitarian President, William H. Taft, from a Bedouin of the desert was too much for me. I saw there was no use trying to convince him of Western consistency, so I got on to firmer ground and told him about four-track subways, with two hundred and forty ten-car trains per hour.

III

One fine day, I found myself on an *ass en route* from the pilgrim city of Kerbela to the ruins of Babylon. German archæologists had been busily uncovering that jumbled mass of crumbling glory for more than ten years. Beside the ancient bank of the Euphrates they had built a great brick pile around a court, which they called the 'Castle.' Here they lived.

After the day's work in the excavations or over the drawing-tables, they would foregather in a common dining-room for the evening meal. Dinner finished, we would sit around the long table for several hours, smoking and chatting at random. My host, Dr. Koldewey, was quite loquacious, but with the happy faculty of making all his remarks interesting. He was the director-general of all the archæological work, and one of the world's authorities on Babylonian research. Having the additional distinction of working under the personal patronage of the Kaiser, his opinions on all subjects were given the more weight.

I remember one evening's conversation in particular, not only because I was listening to a savant of international reputation, but primarily, I think, because it was one of the milestones in my emergence from American provincialism.

To contribute my share to the exchange of ideas, I recall dilating upon

my recent experiences with the Turks. I told of their backward ways in government and business, citing some amusing peccadillos of which I had been the victim.

But Dr. Koldewey could hardly wait for me to finish. Nodding assent to all that I had implied, he said with an inclusive gesture of his arm, —

‘Yes, yes, you cannot surprise me with any tales about these people. They are played out I tell you, quite finished, all of them, these Turks, Arabs, and other odds and ends of nations hereabout. I call them a “museum people.” By that I mean to say that they should be thrust aside, put in a glass case as it were, for the entertainment of curious tourists. And a strong efficient race must come in and take the reins of government and put these people in the glass case where they belong.’

While still marveling at the stark boldness of his theory, and before I could formulate a defense for the peoples thus summarily disposed of, he continued, —

‘Now take the French, for instance. There is another *ganz-kaput* race, decadent, effete.’

He took a draught of wine from a silver beaker; he leaned forward and reached his long arm out over the dinner-table. Speaking with slow precision and punctuating each word with a tap of his forefinger, he said, —

‘Mark my word! The next time we go into France, we will take it all, all I say, to the Channel and to the Mediterranean. But we may give back Paris, perhaps, for to Germanize it would spoil it.’

I agreed with gusto to his last statement. Then he hastily resumed, set teeth showing through his smile, ‘Yes, we will draw a circle around Paris, and keep it *tout-à-fait Parisienne* — a place where we can amuse ourselves when our serious work is done.’

My astonishment was doubled when I noted the exuberant approbation on the faces of all his colleagues. Had Dr. Koldewey spoken only for himself, I would have put him down for a crank; but I saw that he voiced the desire of all these archæologists and architects, men who, I had supposed, were freed by their science from the jungle code of the militarists.

Later in the evening, one of the younger men, Herr Bunte, and I went for a walk. As we strolled along the Euphrates bank, soft moonlight slid down the fronds of graceful palms and latticed the ground with a gentle glow. The quavering wail of a song came over the velvety air from an Arab hut, an oar plashed nearby, sending a phosphorescent ripple over the river’s bronzy face. Everything was so quiet and peaceful; who could have held a bellicose thought?

This young scientist, Bunte, had already shown me the picture of his fiancée, a pretty German girl; but now he was expatiating upon the horrible summer climate of Mesopotamia, telling me how enervating it was. Thinking to dispel his pessimism, and especially his thinly veiled apprehension at the thought of bringing a blooming bride to this fever-ridden country, I casually remarked, —

‘Your life-work is here; you say this is the original hell in summer and that white women fade out here in no time. It seems to me that you have the perfect bachelor’s job. Why do you get married, anyway?’

Now Herr Bunte was a most placid-looking young man — short, pudgy, phlegmatic, with small pale-blue eyes. The very last thing I ever thought to do was to strike fire in so prosaic a morsel of human clay; but my thoughtless question seemed to electrify him. The blood rushed up the back of his neck, the straw-colored hairs on it seemed to

bristle, he flung out his fist toward the unoffending palms, and answered me in almost savage stentorian tones, —

‘Why am I going to get married, you ask? To make soldiers for my Kaiser.’

IV

The world war came on apace, and a year after my visit with the Germans at Babylon, I found myself in charge of the feeding of the French civil population in the Department of the Ardennes in the invaded part of France. My headquarters was at Charleville-Mezières, with the ‘Grosses Hauptquartier,’ the German General Staff.

One evening in particular stands out in my memory. I was the only foreigner sitting at a long table of staff officers: old generals with the *Pour le Merite* of Frederick the Great hanging from their collars, colonels and majors with the Iron Cross. Although I was there representing a work of inestimable value to Germany, the free feeding of the people she had rendered destitute, I gradually found myself the butt of innuendo and subtle disparagement of my country. But several months in the society of German officers and under their vigilant surveillance had taught me a measure of self-control. I had become accustomed to hearing America held in contempt. The only way I preserved a calm exterior was by constantly holding in my mind an image of the French people whom I was there to serve. My task was made the easier because most of the German insults, veiled and otherwise, were on the lowest plane. That is to say, physical considerations alone were the criteria by which we were judged. Because we were ridiculously small, as soldiers and cannon are counted in Europe, by the same token we were despised, even taunted.

Toward the end of that interminable

dinner of angular rigidity and clicking of spurred heels, an orderly brought in the evening’s communiqué. My host read it aloud, while everyone listened intently. First came the military news: a succession of victories in Russia — countless thousands of prisoners, hundreds of cannon, mountains of booty. A whole Russian army had disappeared, it seems, in the Masurian swamps. I noted that chests were thrown out a trifle more, fingers reached for the slender stems of champagne glasses, and the eyes of the orderlies standing behind our chairs bulged with happy comprehension.

But there was more to come: my host held up one hand to postpone the toast to the victorious Hindenburg, and continued. A new note had been received by the Imperial government from President Wilson. It was the result of the taking of more American lives on the high seas. But this last note was more than a protest: it was sharper in tone, it contained a distinct warning.

My host, a German count, laid aside the communiqué which he had just finished. Leveling his malevolent eyes upon me, a guest and a foreigner, he said in a ringing voice, —

‘Come on, America, weakling number seven; we will finish you up in two months!’

Still one year later, in the summer of 1916, I found myself in a tiny Russian village just below the Arctic Circle. Our ambassador had sent me off into the interior, to distribute relief-money which had come from Austria and Germany to the American Embassy. This monthly stipend of ten to twenty roubles was frequently all that stood between the unfortunate German and Austrian civil prisoners and starvation.

My secretary and I were sitting at the head of a long deal table, taking receipts for all the relief distributed,

and also receiving innumerable complaints. When the routine work was finished, the German chairman said that he and his companions would like to have me tell them about what I had seen behind the German lines in Belgium and Northern France. They said that the stories they read in the Russian press were incredible, and they wanted to hear from an eye-witness.

I admitted that the stories coming to the outside world from those wretched countries were incredible. But I further admitted that they were for the most part true. As I went on, describing the country roads lined with the charred walls of peasants' cottages, some with ugly splotches on them where whole families had been lined up and shot down by the ruthless invader, I saw that my words gave them little comfort. But I could not resist the temptation to give these people a little of the unvarnished truth, hoping that something might penetrate their national conceit. I thought their blind bigotry all the more paradoxical since many of them, having been born in Russia, spoke Russian better than German, had intermarried with Russians, and some of them had never even set foot on the soil of what they called their fatherland. And yet they nourished that vaulting pride in their nationality, a pride which permitted these otherwise intelligent adults to ascribe to their own race all the virtues, while imputing all the vices to those among whom they had cast their lot.

When I had finished my dissertation on German frightfulness, the chairman of the *Hilfs Komitee* said, —

'It is with deep regret that in listening to the American gentleman's remarks we have had our own worst fears confirmed. Here in our isolation we had hoped that all the tales we heard against our countrymen were the calumnies of our enemies. Now we see

that the exigencies of war have compelled the Fatherland to thrust aside any small considerations of sentiment, so that no obstacle would stand between her and the fulfillment of her divine mission. If our guest and benefactor here has ever traveled in Germany, he will be the first to admit that we, as a people, have the most highly developed and perfectly formed Kultur that the world has ever known. Having received this heritage by virtue of the struggles and sacrifices of our fathers, it is our duty to spread it all over the world, until less fortunate peoples have come under its influence.

'Imagine the inestimable boon which our Kultur will bring in the trail of our victorious armies! Take these benighted Russians, for instance—filthy and ignorant, they are mere animals. They will not understand until years later why we have come to them, and what our nation, under the beneficent guidance of our Kaiser, has to give them.

'Or again, regard with pity and loathing that ungodly and immoral people, the French. Only after their wicked pride is broken by Germany's mighty sword, only after they have expiated their sins in years of bitter suffering, will they find the wisdom to come humbly and learn from us.

'But it is in the case of England that the hand of destiny is most clearly to be seen. Here we have a small people, small numerically, small of soul and small of mind, who, with the cunning of knaves have played the part of corsairs and buccaneers for centuries. Mimicking our noble tongue, they affect the rôle of "gentlemen," while they are in reality robbers at heart. But they will learn, as the whole world will learn, that Germany is the scourge of God, which will purge the earth of its corruption.

'We Germans have come to realize

that we are a chosen people. We have been chosen to bring to a vicious world the perfect flower of our Kultur. If other nations will not cast the scales from their own eyes, we must strip them off for them. I swell with pride each time a new foe joins the ranks of our enemies, for then I realize how universal a blessing our eventual victory will be. We cannot fail, our God is with us. He will bring us through triumphant.'

v

That expression, 'our God,' has some very interesting connotations. In many respects it is the keynote of the primitive paganism which has produced the tribal psychology of the German people of to-day. Many of the Kaiser's speeches, and the discourses of his ministers in the Reichstag and Prussian Diet, have wound up with a grandiloquent reference to 'our God,' who will see them through to victory, or to 'the old German God,' who confounds their mutual enemies. It is the concept of a distinctly tribal divinity, not a universal god. Their God is not the same one who presides over the destinies of their enemies. It is not the God of all mankind before whom they lay their cause, basing their hope for success and for divine assistance upon the inherent justice of that cause. No, it is the god of a tribe who fights with them and for them, who holds up their right arm in battle and punishes the wicked enemy.

It is one of the great paradoxes of history, that the barbarian Teutonic tribes, after the sack of Rome, should have adopted the Christian deity as their tribal fetish. It would have been so infinitely more in keeping with Germany's 'world-mission,' and with German philosophy, if they had remained true devotees nominally, as they have remained true spiritually, to Thor or

Odin and the whole hierarchy of warrior gods.

Ever since the first day of the war, and even long before, the general tenor of statements from publicists and statesmen, from scientists and literati, in the press and the pulpit, has been the same. It has been the attitude of 'we Germans' as opposed to the Philistines, a chosen people pitted against a world of inferior and apostate tribes.

Meeting Germans individually, like the various persons quoted herein, one finds nothing abnormal about them until some subject is broached which has international implications. At that point an American or Russian or Arab has to part company with the German, for the former invariably finds that the German has a different set of morals for the state, or rather for his tribe, as distinguished from that code which is applicable to the individual. We can go hand in hand up the rungs of the ethical ladder, from the first rung of the little amenities of individual intercourse, on through the varying degrees of family association, as groups of friends in clubs and societies, as larger communities in towns and cities, on up to the larger group of the whole race bound up in the nation. Up to that point, we all subscribe in a general way to the same moral code; in any event, we can always find some common premise on which to build up an understanding.

But it is the step next beyond, the concept of national morals, in which the German differs from the rest of the world. It is that last and highest rung on the ethical ladder, the sphere of international relations, where the German stands forth in the eyes of all mankind, morally nude.

Notwithstanding all their accomplishment in the sciences and in the arts; notwithstanding clean streets and garden tenements, the hall-marks of

modern advance, the German people are still, to-day, absolutely tribal in their psychology. That is why they are out of joint with the times. Other nations regard them as backward in their evolution toward an international point of view, while the Germans neutralize or kill all attempts to draw them closer to a mutual understanding by their colossal and bombastic tribal conceit.

This tribal quality of German national psychology has this significance for the rest of the world. If the government of any of the internationally minded nations commits a crime against the comity of the world, or against the spirit of a 'league of nations,' that government, and inferentially the people which it represents, is sinning against light. In plain language, they are breaking the Golden Rule, and they know better. But with the German it is different. He acknowledges the Golden Rule in principle, as affecting the individual; but the state, that embodiment of him and his fellows in the tribe, is subject to no moral code, human or divine. In fact, some of Germany's greatest spokesmen have taken great pains to instruct the world that the German state is superior to ethics, or rather, that she makes her

morals to suit the exigencies of her desires. In other words, the state can do no wrong.

Now the rest of the world has not the slightest objection to the German people preserving a fifth-century psychology under the camouflage of a twentieth-century suit of clothes. That is preëminently the German's own business. No one wants to drag him into the family of nations by the scruff of his neck. But the rest of the world does strenuously object, to the point of resisting with all its physical and moral strength, when the Germans presume to carry their Kultur beyond their own borders and superimpose it by force upon their neighbors.

When the idea once begins to penetrate the thick hide of German conceit, that the rest of the world repudiates their culture, that its spirit is universally regarded as an anachronistic survival of tribal days; when that time comes and an austere introspection lays its merciless scalpel upon the German national character, a new light will illumine the mind of that great people. They will storm the door of the House of Nations, and millions of scarred hands will knock furiously for admittance.

CAVEAT EMPTOR

BY H. T. AVERY

I

THIS is the story of the bartering and trading of Silas Ball's old horse Dobbin in and about Forestport, and of Squire Palmer's famous horse lawsuit: a simple statement of the facts for the consideration of the jury.

Everybody knew Dobbin, and as for Silas Ball and his good wife Mary—in the fifty years which they had spent together on the farm where Silas was born, not a shadow had fallen on their devotion to each other, not a day had passed unmarked by kindly, neighborly acts of loving-kindness.

For the last twenty of these years, Dobbin was the faithful family horse that took them on various drives for business and pleasure. Next to each other Silas Ball and his wife loved Dobbin.

It was a golden Saturday afternoon in October, with every tree on the hills and lowlands glowing with autumnal color, when Silas Ball hitched Dobbin to the time-honored family phaeton and set forth on a memorable drive to Forestport, six miles away, to collect some store-fixings for a neighborhood party which the Balls were giving on the Monday following.

Lured by the witching weather, scores of other Forestport suburbanites came to the village that Saturday, and one and all were delighted to see their good old friend Silas Ball. So, what with passing the time of day with these old-time tillycums of bygone years, Silas was unable to begin the return trip until the sun had set.

When once he had untied Dobbin, and seated himself in the roomy phaeton, and said, 'Gid ap, Dobbin boy,' the old man with smiling face leaned far back on the comfortable cushions, closed his eyes, and began to dream, knowing that Dobbin would trot faithfully along the road home. And scarcely had Dobbin started when Silas Ball dropped off to sleep.

Perhaps he had slept an hour; possibly more. No one will ever know. But somewhere along the road home, a weary blood-vessel in the good man's brain gave way, and the nap which had begun with smiling face became that long sleep from which there is no mortal waking.

Faithfully Dobbin trotted on and on until he came to the gateway leading to the Ball yard. There he turned and went straight ahead to the barn-door, where he stopped, waiting to be unhitched. How long he waited must remain a mystery, as must his actions, except in so far as Mrs. Ball was afterwards able to explain them. At the sound of the whinnying of the horse near the front veranda, she opened the door—to behold Dobbin pawing with one foot on the lowest step apparently to attract attention. A moment later, when, after trying in vain to waken him, she had caught her husband's limp body in her arms, Mrs. Ball realized that the great tragedy of her life had come.

In the lonely days that followed, it was natural that good old Dobbin should creep more and more into the

vacant place in Mary Ball's heart, and that, when she died, a short time after, she should leave a provision for Dobbin in her will.

Therein she directed that five thousand dollars be set aside for the maintenance of Dobbin, and that he be kept in peace and plenty until such time as the ravages of years should make life a burden to him, when he should be humanely put away.

The remainder of her estate was left to her only nephew, George Ball, a successful young business man in a city fifty miles from Forestport. George Ball was named sole executor of the will, and on his arrival took charge of the funeral ceremonies and the estate, with a new sense of responsibility and a peculiarly loving desire to carry out his aunt's wishes regarding Dobbin.

When he rented the Ball farm to Jethro Jenkins, he arranged for the board and care of Dobbin, with most minute precautions to insure the complete comfort and happiness of the old horse's declining years. The arrangement was made only after he had carefully investigated the tenants and had discovered that Jethro Jenkins was a reliable, industrious, and trusted citizen in the Ball community. The unanimous decision of the people for miles around was that George Ball could find no better tenant in the state, nor one to whom Dobbin could be more satisfactorily intrusted.

In discussing the daily routine in Dobbin's previous life, George Ball found that he had been used for family driving, and for light work in one-horse agricultural implements. He found further, that Dobbin, in the opinion of all the worthy farmers whom he consulted, would be happier if he were allowed to exercise in moderation, as he had been accustomed to do in the past.

So George Ball settled with Jethro Jenkins as to the amount of exercise

Dobbin should have, and with all provisions made, returned to his home and business.

II

Jethro Jenkins was an energetic man, and he and his wife and children found exceptional inspiration in the comfortable home and splendidly kept farm that had passed to their care. They were eager to conduct their tenancy in a way that would justify George Ball in continuing it, for the executor had been liberal in making the lease.

One and all, the family felt that Dobbin was almost one of them, and the old horse found loving hands at the reins whenever he was driven, or allowed to haul the light cultivator, or some other tool, for a short time.

The Ball place was larger than any on which Jethro Jenkins had lived before; and whereas Silas Ball had hired two hands regularly, Jethro set forth to work the place alone, except for an occasional hired hand for a day or two, on special jobs.

The Jenkins family arose with the sun each day, and one and all spared not themselves to do the work of the big farm. Unusually favorable weather that spring made the crops grow luxuriantly, and with them the ever-present weeds kept pace. Bumper crops were sure, if only the weeds were kept cultivated out; and Jethro Jenkins energetically went about the task of accomplishing this.

Probably no horse ever lived that knew more about a horse's part in cultivation than Dobbin. He walked steadily and evenly, always kept in the middle of the row, and turned neatly into the next row when he got to the end. Holding the hands of the cultivator steadily was all the help from humans that Dobbin needed. In the rush, while Jethro Jenkins drove the team to the wheel-cultivator, Mrs. Jenkins

handled Dobbin in the light cultivator, and the farm-work went cheerfully along.

But the green-eyed monster JEALOUSY lurks ever in remote sections, even as in less sequestered places; and the success the Jenkins family were making of the Ball farm was not unnoticed by some one in the vicinity, nor was the value of Dobbin overlooked.

So it came to pass that George Ball one morning, at his business office, opened a letter which the green-eyed monster had prompted. It was an anonymous letter, which told at length how Jethro Jenkins was abusing Dobbin and working the old horse to death; and it stated that Dobbin had grown thin under the heavy burdens placed upon him.

Two days later, George Ball appeared at the home of Jethro Jenkins. Briefly, he told Jethro that Dobbin had grown thin, so thin that there was no doubt the horse had been abused.

Mr. Jenkins, with righteous indignation, denied that the horse had been misused. Further, he explained in honest detail the affectionate treatment and care which had been given to Dobbin, and he convinced George Ball that there had been no intentional neglect or over-exercise.

But Dobbin admittedly had grown thin, urged George Ball; and finally Jethro Jenkins ventured the opinion that old age was showing in the faithful animal, and that he was no longer able to build up strength and weight as rapidly as the action of time tore them down. It was then agreed that it would be humane to end the suffering of the horse, in strict accordance with the stipulations of Mrs. Ball's will.

After some consideration of the labor involved in thus bringing about the peaceful demise of Dobbin, Mr. Ball agreed to pay Jethro Jenkins six dollars for services as executioner, under-

taker, and sexton; and it was agreed that Mr. Jenkins should carry out the contract on that same afternoon or evening.

Having assured himself that the wishes of his aunt regarding Dobbin were to be carried out according to both the letter and the spirit of her will, and having selected a place for the horse's grave on a pretty knoll at the far end of the orchard, George Ball started on his return home.

About four o'clock on the same day, Jethro Jenkins led Dobbin from the stable, intending to take the faithful beast out into the orchard and humanely send him to everlasting rest.

As he emerged from the barn-door, leading Dobbin in one hand and carrying a Winchester in the other, he met his brother Isaac Jenkins, who had come to swap visits for an hour or two. Ike Jenkins, totally unlike his brother Jethro, was lazy, shiftless, and irresponsible, living to-day on the wages of yesterday, except when he was able to discount the wages of to-morrow with some trusting soul.

After passing the time of day, Ike, with native curiosity, inquired what Jethro might contemplate doing with Dobbin and the gun.

Jethro patiently explained the story of George Ball's visit and the impending demise and burial of Dobbin.

A considerable parley ensued, and finally Ike Jenkins proposed that Jethro give him the contract to kill and inter Dobbin, and agreed to do the entire job in a workmanlike manner for the sum of three dollars.

Ten minutes later, Ike Jenkins, with three silver dollars jingling in his overalls pocket, led Dobbin down the road to the small farm which he rented and pretended to work, and turned him into the barnyard.

Taking a pick and shovel, Ike then proceeded to the Ball orchard, and on

the spot selected by George Ball dug a hole that should serve as a final resting-place for Dobbin. When this was done, he went back to the house, as it was supper-time. He ate hurriedly of a frugal meal, and shortly afterwards emerged from the house with the rifle which was to be the instrument of the taking-off of Dobbin.

Half-way between the house and the barnyard, he was hailed by a man who was driving down the road that passed the house. The signaler proved to be Sol Foggan, a horse-buyer from the city where George Ball lived. It was Sol Foggan's business to scour the country for miles round his home, buying horses to sell in the city market; and at least six times a year in the course of his campaign he visited the farmers about Forestport.

Mr. Foggan, in his travels, would buy, sell, or trade — it mattered not to him so long as he might turn a nimble dollar. It happened, therefore, that he was not finicky about what sort of beasts he dealt in. He would pay boot on a trade for a better horse, or swap a prime animal for an equine wreck, always in consideration of a cash difference. He was a man of financial responsibility, and known as a square trader as traders went around Forestport; but in justice to his abilities it should be said that he made it a point to emerge from a trade with a profit on his side.

Having attracted Ike's attention, Sol queried, 'Got any horses to swap?'

'Naw,' drawled Ike disinterestedly. 'Ain't got nuthin' but an old plug that I'm just goin' out to kill with this here rifle.'

'Where is he?' asked Sol with ready interest, quickened by the conviction that there was some possible margin of profit in any sort of a live horse.

Hitching his own steed to a tree, Sol followed Ike to the barnyard, where the

faithful Dobbin was browsing on some clumps of clover. Critically he inspected the animal from his teeth to his tail, passing comments to the effect that the horse was thin and old and otherwise of little value.

Isaac Jenkins said not a word.

'What you want to kill him for?' Sol inquired, leading at last to the point, for he saw that conversation was Ike Jenkins's short suit.

'Family horse,' answered Ike laconically. 'Wife thinks so much of him she don't want him sold to strangers where he might be abused; and I've promised her to put him away decentlike, as a reward for his sixteen years of faithful service.'

'He must 'a' been quite along in years when you bought him, if you've only got sixteen years' service out him,' returned Sol.

'Naw, he warn't more'n a two-year-old, I reckon,' declared Ike. 'It ain't a matter of age, though, but of sentiment; so I'm goin' to put him away.'

'What'll you take for him?' asked Sol, bluntly.

'Don't want to sell,' parried Ike; 'but what'd you give if I was sellin'?''

A long conversation ensued, which finally resulted in an offer of ten dollars from Sol and a price of sixty dollars from Ike. More conversation and Sol Foggan became the owner of Dobbin, while Ike Jenkins added thirty paper dollars to the three silver ones already jingling in his overalls.

As Sol Foggan drove away from the Ike Jenkins place, old Dobbin, led by a halter, trotted cheerfully behind; and the enveloping folds of night threw darkness over the surrounding countryside.

When they had disappeared down the road, Ike Jenkins proceeded to the knoll in the Ball orchard where he had dug the grave. Bang! Bang! went the Winchester, sending echoes resounding

from the neighboring hills, and telling the family of Jethro Jenkins, who were at their tardy supper, that poor old Dobbin was no more. Then Ike Jenkins gathered some brush and stones, which he placed in the excavation to fill the space that Dobbin's corpse was to have occupied, and carefully covered them with the dirt. After this, he sodded the grave over to give final proof that he had spared no pains in giving Dobbin a decent burial. Darkness was heavy over him as, like the grave-rober of fiction, he took a circuitous route home through the back fields, clutching ever and anon his unheard-of fortune of thirty-three of those incentives that are commonly supposed to make the fabled female horse go.

III

It was about nine o'clock when Sol Foggan drove up to Watt Brick's livery-stable at Pompton, a village ten miles west of Forestport, where he engaged accommodations for his driving horse and Dobbin for the night. Then he went off to the Pompton House, to arrange for his own refreshment and lodging.

The following morning Mr. Foggan, having breakfasted, appeared at Brick's livery stable at seven o'clock, planning to continue his horse-dealing pilgrimage toward his home city.

Now, Watt Brick was a horse-dealer in a small way, who not infrequently bartered and traded with Sol Foggan; so he was interested when Mr. Foggan asked him if he had any horses to sell. Brick had none, but he did want to buy a good, safe, cheap horse that women could drive with comfort and enjoyment.

'Got just what you want!' declared Sol briskly. 'He's some old and thin, but a little rest and feeding will make him good for ten years of service.

Sound in wind and limb, free traveler, true in all harness, ain't afraid of automobiles or anything, and 'll stand without hitching. Hook him up and see what a likely critter he is.'

In the next half hour, old Dobbin, hitched to a single buggy, displayed his exceptional qualities to Brick and Foggan. Mr. Foggan, after due deliberation while Dobbin was being hitched up, decided that he would ask fifty dollars for him. At the end of ten minutes his decision had been raised ten dollars. In half an hour, when Dobbin was driven back to the barn, Sol's price had risen to ninety dollars.

Considerable conversational sparring followed; but shortly Watt Brick became richer by the ownership of Dobbin and poorer by the transfer of seventy-five dollars, and Sol Foggan drove on, leisurely and not discontentedly, over the country byways, buying, selling, or trading a horse here and there as opportunity afforded.

Now, despite the fact that Watt Brick was a promoter of horses and made his living by grinding dollars from horse-flesh, he had a real consideration for the creatures, and a horse sense that made him treat any animal in his possession with humanity and consideration. For more than three weeks old Dobbin enjoyed a carefully considered rest and diet cure in Brick's comfortable stable; and as the treatment was essentially wise and superior, and Dobbin was otherwise healthy, the old horse responded promptly to his new master's veterinary skill and grew plump and youthful.

It is now necessary to explain that Pompton was an attractive place for widows and old maids, and that its chief business enterprise was a state normal school. Thus it happened that Watt Brick's livery-stable catered largely to the many female souls who broke the monotony of the little place

by frequent drives. Dobbin sprang into instant favor with this class of retired gentlewomen, and became one of the valuable productive factors of Brick's livery-stable.

Pompton was but four miles from Ashland, a modest city of about fifteen thousand population; and superior institutions native to Pompton soon gained notice in Ashland.

Hence, entirely aside from any reasonable connection with the circumstances surrounding events in the previous life of old Dobbin, Henry Green of Ashland came to a time when, endowed with a delightful wife and three children and with a substantial raise in salary, he desired to possess a reliable driving horse that would furnish outdoor recreation for his wife and his three youngsters. But Mr. Green, in his search for a steed that would fit his peculiar needs, soon discovered that horses of the type he desired were most uncommon. He canvassed the horse markets of Ashland without finding what he wanted; but the course of his search at home developed the fact that probably he could find the sort of horse he wanted at the livery-stable of Watt Brick in the neighboring town of Pompton. Whereupon Mr. Green took a day off from his work, and the morning train from Ashland to Pompton, and at noon appeared at Brick's stable.

With proper circumstance and detail Green explained to Brick the kind of horse he was seeking. Brick listened attentively, and with honesty confessed that he had no horse that would measure up to Green's desires and needs. But he had scarcely made this announcement, when a carriage drawn by a single horse drove into the barn. The solitary occupant of the buggy was a gray-haired woman, and she was obviously pleased and happy. After she had alighted and paid for the use of the horse and buggy she asked, —

Mr. Brick, what is the name of the horse I had this morning? He is the finest horse I have ever driven. He is n't afraid of anything and can travel along at a comfortable pace, and when I want a carriage in the future, I want this horse. Also, I want to know his name, so that a number of my friends can know the joy and safety of riding and driving such a fine horse.'

Mr. Brick told her the horse's name was Dobbin, and then turned his courteous attention to Mr. Green. But Green had been listening to the conversation and was so impressed that he blurted out enthusiastically, 'There's the sort of a horse I want! What do you ask for him, Mr. Brick?'

'Oh, he ain't worth much as horses go,' answered Brick, 'and I would n't sell him. Why, he's one of the best money-making horses I've got. He's old and commercially ain't worth much of anything; but for me he's mighty valuable. He earns a heap. I could n't sell him because I'd have to get eight or ten times his intrinsic worth. Why, Dobbin is the old maids' one best bet. They all want him, and he's an ideal critter for them, and he's in such demand that he's on the go all the time. If I ever sold him, more'n twenty good women customers would never forgive me nor patronize me again.'

But Mr. Green was obdurate. He wanted Dobbin. Further, he intended to have him. He insisted that Watt Brick put a price on the horse, and, cornered at last, Brick declared that he would n't take a cent less than two hundred and fifty dollars for Dobbin, adding, 'He ain't really worth more'n half that, and I'd hate to sell him even at that price.'

A lengthy parley followed, with the result that Dobbin passed to the ownership of Green for a cash consideration of two hundred and ten dollars.

During the next several weeks, the

Green family daily became more and more satisfied with their purchase and more and more attached to the faithful steed. It is certain that Dobbin would have lived out his worthy life as a member of the Green family, had not the green-eyed monster once more set its emerald orbs upon him.

Some one who lived near the old Ball homestead one day drove to Ashland, and after hitching his own horse to a post, observed a horse at the next post. This other horse looked strangely familiar. There could be no doubt about it—it was Dobbin, supposedly dead and buried. Further, it was all clear to the shrewd mind of the observer: he realized instantly that Jethro Jenkins had sold Dobbin instead of keeping his word to George Ball, and had pocketed a neat sum in the operation.

The observing one made suitable inquiries, with the result that he possessed himself of a part of the chain of events which attended the passing of Dobbin from Jethro Jenkins's possession to that of Mr. Green. And a few days later, George Ball, in his busy office, opened an anonymous letter which told the despicable tale of the fraud that had been perpetrated in the sale of Dobbin, and contained only the one error of accusing Jethro Jenkins of being the person who had sold the horse to Sol Foggan.

IV

Of course, George Ball was no less shocked than angry when he heard the shameful news, and forthwith took the train to Forestport to verify the story, and, in the event of its being true, to avenge the wrong, and with his own hands to carry out the provisions of his aunt's will concerning Dobbin.

At Forestport he quickly retained Squire Palmer, a fighting lawyer of the county, and together they traced out

step by step the story of the exploitation of Dobbin.

Learning the truth, Ball followed the plan that Squire Palmer advised for righting the wrong. This consisted in compelling Henry Green to hand Dobbin over to Mr. Ball, as he had acquired no title to Dobbin, since the horse under the circumstances was really stolen property, and therefore the property of the person from whom he had been stolen.

Then, after securing possession of Dobbin, George Ball caused the old horse to be killed humanely, decently buried in the Ball orchard, and thus laid at rest in conformity with Mrs. Ball's will.

But the ghost of his grievance still stalked the countryside, for Henry Green, as an injured and innocent party to the affair, consulted Squire Palmer as to his own rights; and finding them clear-cut and plain, retained the squire to collect the price paid to Walt Brick for Dobbin.

Forthwith, Squire Palmer called on Brick and explained the statutes in such case made and provided, and collected the purchase price of two hundred and ten dollars from Brick.

Also Squire Palmer received a retainer from Brick to collect from Sol Foggan the money that he had paid him for Dobbin.

A brief letter explaining the circumstances, written by Squire Palmer to Sol Foggan, caused the latter to journey to Forestport, ascertain all the facts, reimburse Brick for the seventy-five dollars paid for Dobbin, and retain Squire Palmer to collect from Ike Jenkins the thirty dollars that Foggan had paid him.

At this point the horse lawsuit caught up with its shadow that had so long been projecting ahead.

But Ike Jenkins long since had spent the thirty dollars received for Dobbin,

as well as the three dollars received for dispatching the old horse. Further, he maintained that, as the horse was to be killed, no value attached to the animal and no damage had been done by selling him; and that legally he had a right to profit by his ability to make a worthless thing valuable. Also he was sure that no time was set in the contract for bringing about the demise of Dobbin, and as the horse was dead and buried, the contract that he, Ike Jenkins, had agreed to perform had been carried out.

Also, that, as Jethro Jenkins had a legal right to sublet the job of seeing Dobbin laid away under the turf, he himself was within his legal rights in subletting the contract. Also, that the doctrine of *caveat emptor* prevailed in dealing with Sol Foggan, and Foggan could cave and empt to a fare-you-well before Ike Jenkins would pay him one cent of the thirty dollars except on the tip end of an execution from the court of last resort in the state.

And so Sol Foggan, through Squire Palmer, sued Ike Jenkins in the Justice Court of Forestport for the thirty dollars. And Ike Jenkins, through Squire Pikerman, hated rival of Squire Palmer, defended the action.

A jury of good men and true was drawn, and everyone for miles around crowded the village hall of justice to hear the trial of this hotly contested horse lawsuit.

All day the bitter battle raged, with the two squires contesting every inch of the ground. For two hours each the opposing counsel addressed the jury, in pleas that sent thrills through the spectators.

Finally, almost at the witching hour of midnight, the case was given to the jury, who thereupon retired to consider their verdict.

The early hours waned and passed, while the jury wrestled with the facts and the law that the case presented. Convictions ran high. The debate was acrimonious. Hour after hour passed, and agreement grew remote.

Eventually all but one of the jurors agreed that Sol Foggan was entitled to a verdict for thirty dollars. That one, Silas Hugaboom, who had been a juror for many years and never lost a verdict, stuck by his guns, declaring that, 'This here lawsuit is one of equity, not law, and in such a case, equity must control. And equity,' he announced with finality, 'clearly provides that there is no justice in making a man pay for a dead horse.'

At nine o'clock the following morning, the tired and bedraggled jury crawled into court, announced that they could not agree on a verdict, and were discharged.

So Squire Palmer's horse lawsuit will be tried over again before another jury next Wednesday.

PORTRAITS OF AMERICAN WOMEN

III. SARAH ALDEN RIPLEY

BY GAMALIEL BRADFORD

Chronology

SARAH ALDEN BRADFORD

Born in Boston, July 31, 1793;

Married Rev. Samuel Ripley, 1818;

Lived in Waltham, Massachusetts, 1818–1846;

Husband died, 1847;

Died in Concord, Massachusetts, July 26, 1867.

I

FEW American women of to-day know of Mrs. Samuel Ripley, but a sentence from Senator Hoar's *Autobiography* will give her a favorable introduction: 'She was one of the most wonderful scholars of her time, or indeed of any time. President Everett said she could fill any professor's chair at Harvard.' To this we may add the testimony of Professor Child, whose authority no one will question: 'The most learned woman I have ever known, the most diversely learned perhaps of her time, and not inferior in this respect, I venture to say, to any woman of any age.'

It seems worth while to know a little more about her, does it not?

From her childhood she had a passion for books and study. Every available minute was snatched for them, and some that were not available. 'I never go to Boston or anywhere else, my passion for reading increasing inversely with time,' she writes when little more than a child. In the early

years of the nineteenth century, when she was growing up, New England was not very favorable to the education of girls — nor was any other place. But she was fortunate in having a father — Captain Bradford of Duxbury — who was a scholar as well as a sea-captain, and who loved her and liked to indulge her fancies.

'Father, may I study Latin?' she asked him.

'Latin! A girl study Latin! Certainly. Study anything you like.'

Whereupon she compares him, greatly to his advantage, with another father who endeavored to convince his daughter that 'all knowledge, except that of domestic affairs, appears unbecoming in a female.'

Becoming or not, all knowledge was acceptable to her. She studied Latin until she could read it like a modern tongue, Greek the same, also French, German, and Italian. She did this largely alone, German without any assistance whatever, persisting incredibly, 'working still at an abominable language without being sensible of the least progress,' she complains. Nor did she confine herself to languages. Her zeal for mathematics and philosophy was fully equal. Most of all, perhaps, she loved the sciences; and chemistry, astronomy, and especially botany, were a delight to her from youth to age.

Nor did she take her study of languages as a task simply, as an end in

itself, as so many do. It was but a means, a greater facility for getting at the thoughts of wise men and past ages. She read Latin and Greek widely as well as thoroughly. Tacitus and Juvenal must have furnished odd reflection for a schoolgirl, and it is not every infant of fourteen who regales her imagination with the novels of Voltaire.

Naturally such solitary reading in a child of that age had something academic about it, and the intellectual enthusiasm of her early letters abounds in pleasing suggestions of copy-book moralities. Yet the keen, vigorous insight often breaks through, even here. Conventional habit might lead an ordinary student to moralize on death; but few ordinary students would generalize their botanical observations into the remark that soon 'our bodies transformed into their airy elements may be converted into the jointed stalk of the rank grass which will wave over our graves.' Pretty well for a girl of sixteen!

And though she studied rules and learned traditions, and so early laid over her spirit a mighty mass of authority, she did not propose to be in any way a slave to it. When rules vex her, she cries out against them. For instance, she could never spell, and why should she? 'I wish the free spirit were not trammelled by these confounded rules.' Also, while she studies for study's sake, and could hardly be expected, in the early days, to interest herself too much in the why of it, you get singular hints of penetration where you least look for them. She asks herself whether her devotion to the Classics springs 'from pride of learning in your humble servant or intrinsic merit in Cicero, Virgil, and Tacitus.' The question is one that many an older scholar might put with advantage.

It is, above all, in the line of religious

speculation that one examines most curiously Sarah's gradual change from a conventional acceptance of what is taught her to fierce, independent thinking for herself. She was brought up on by no means narrow lines of orthodoxy. But in her early letters there is a serious and earnest acceptance of the fundamental doctrines of Christianity and a loyal effort to apply them practically. Gradually this unquestioning submission yields to the steady encroachment of the spirit of inquiry, the 'dread of enthusiasm, of the mind's becoming enslaved to a system perhaps erroneous, and shut forever against the light of truth.' With the process of years the emancipation grows more marked, until little of the old faith is left but the unfailing habit of its goodness.

Do not, however, for a moment suppose that this studious and thoughtful childhood was altogether lost in bookishness, that Sarah was, in youth or in age, a stuffy pedant. She was never that in the least, at any time of her life; never gave that impression to any one. She was at all points an energetic, practical, efficient, common-sense human being. She did not indeed have the eager life of sport and diversion that the girl of to-day has. No girl had it then. There was no tennis or basketball, not even skating, or swimming, or riding. These things would not have been ladylike, if they had been possible. Instead of them, there were only long walks in the Duxbury woods and the rich, wholesome flavor of the New England autumn: 'The great pear tree at the gate, full of orange pears; the ground strewn with golden high-tops; the girl in the corn-barn paring apples to dry; the woods filled with huckleberries.'

Also, there were the pressing cares of daily life, where mouths were many and means were little. Sarah had her

full share of these and met them with swift and adequate efficiency. It is true, she groans sometimes over 'that dreadful ironing day,' and rebels a little when 'Betsey, teasing to know how the meat is to be dissected,' interferes with letters filled with Greek poets and Roman historians. But she comes right down to earth and stays there, heats the irons, dissects the meat, sweeps the parlor, at proper times takes an apparently absorbed interest in shopping and ribbons and furbelows, as a normal girl should.

Even her abstruser preoccupations are put to practical use. The oldest of a large family, she imparts her own acquirements to those who come after her, not making any one the scholar she herself was, but giving them all an education exceptional in that day or any day. Also, she gave them more than book-education; for the early death of her mother left her at the head of the household, and she attended to every duty as if her beloved books did not exist at all. Nor was she moved by the sense of duty only, but by tenderness and affection, as appears charmingly in the words written by her father to her mother from over-sea: 'Tell Sarah (oh, she is a seraph!) that I thank her with my tears which flow fast as I now write and think of her good behavior, her virtues, her filial piety.'

To which let me add these further words of her father, which show that she was a live, flesh-and-blood girl and not a mere copy-book model: 'You I hope are skipping, jumping, dancing, and running up and down in Boston. This I know you are doing if you are well, for you are always on the wing.'

Souls that skip and dance and are always on the wing usually have the elements of sociability in them. In her youth, as later, Sarah was popular and beloved by those who knew her. She

had a singular charm of simplicity and grace, and if she was aroused and interested, she had that social attraction which comes when quick words spring from vivid and eager thoughts. At the same time, she never sought the world and often shunned it. Her first preoccupation was with books, and she turned to them when possible. Trivial social occasions were to be avoided on principle: 'I do not intend to give up all society; I intend only to relinquish that from which I can gain no good.' Moreover, she was naturally shy and self-conscious, doubted her own powers of conversation and entertainment, her own instinct of behavior in company. A dread of impropriety, she says, is the plague of her life. And again, 'I should have exerted myself more, but I believe I shall never learn to talk.'

She was a close analyst of her sensations and experiences with others as well as alone, and this is not a temper favorable to complete social enjoyment. The hearts of those about her she read with equal keenness—a habit also not always socially fortunate. She would not for the world have hurt the feelings of a single human being; and when she reproaches herself with talking scandal, we know that it is such scandal as one might expect from a saint. But even at an early age she saw men and women as they are, and this, alas, in our mingled life, is too often to appear ill-natured. Therefore she turned from men and women to books and thoughts.

Which does not mean that she had not kindly affections, deep and tender and lasting. Here also the sharp probe of her analysis intrudes itself. To her dearest friend she says, 'I love you as much as I am capable of loving any one'; and later in life she observes, 'I have learned by experience that friendship is a plant that must be watered and nursed or it withers.'

But these self-doubting loves often

are the tenderest and truest, and Sarah's devotion to those for whom she really cared was as sincere as it was lasting. With a humility as touching as her independence, she writes to one of them, 'You are the only person who ever thought me of any consequence and I am pretty well convinced that other folks are more than half right. I want you to love me, but do as you please about it.'

These words were written to that singular personage, Mary Moody Emerson, aunt of Ralph Waldo and half-sister of Samuel Ripley, whom Sarah afterwards married. The friendship between these ladies was close and warm, and Mrs. Ripley always spoke of Miss Emerson with the greatest esteem. But one even nearer to her was Miss Allyn, later Mrs. Francis, and the long series of letters that passed between them is delightful in its simplicity, its cordiality, its curious revelation of two pure and sympathetic spirits. What an odd mixture it presents of common daily interests, of religious aspiration, of intellectual enthusiasm. New bonnets, old prayers, botany, chemistry, Homer and Tacitus jostle each other on the same page with quite transparent genuineness and charm.

The one topic supposed to be most common in young ladies' letters, that is, young men and their doings and their attentions, is quite absent here. The truth is, Sarah was not concerned with such things. There is no evidence that in her childhood and youth her heart was ever touched. When she was twenty-five years old, she married Mr. Ripley. She did not pretend that it was a marriage of love on her side. She had the greatest respect for her husband, who was a clergyman of high and noble character in every way. Her father was anxious for the match, and she yielded to persuasion. But at the time a life of solitary study seemed to her

preferable, as she frankly admits. The words with which she announced her engagement, in writing to Miss Emerson, are curiously characteristic: 'Your family have probably no idea what trouble they may be entailing on themselves; I make no promises of good behaviour, but knowing my tastes and habits they must take the consequences upon themselves.' After which, it need merely be added that there never was a more devoted and affectionate wife.

II

I am going to pass at once from Mrs. Ripley in youth to Mrs. Ripley in age, because in fairness I should end with the ripe splendor of her middle years. It so happens that we have abundant correspondence of the earlier and later periods, but little between, when she was too occupied and too active to write. In age as in youth her spirit was pure, lofty, and serene; but with her temperament it was natural that the sadness of age should be peculiarly apparent. The poignancy of the contrast cannot be better illustrated than by two very beautiful passages, written fifty years apart.

In the buoyancy of early days she writes, 'A light breakfast and a ride into town in the cool morning air, stretched my existence through eternity. I lived ages in an hour.' The tottering limbs and broken thoughts of after years recall a dim echo of these raptures, how far, how very far away. 'I took a walk in the pine grove near the cemetery, yesterday morning, and crept down the hill into a deep ravine we used to call the bowl, covered with decayed leaves, where we used to play tea with acorns for fairy cups; the acorns and the cups remain, but the charm is gone never to return.'

It is in this older period of her life

that the impression of Mrs. Ripley's personal appearance survives with most of those who have told us anything about her career. It is not said that even in youth she was especially beautiful; but in youth as in age there must have been the suggestion of earnest purity and dignity, so marked in all the likenesses of her that remain. Her features are calm, thoughtful, noble, sympathetic, but with a hint of the sadness of one who has long meditated on life with vast comprehension and limited hope.

This impression of sadness is undeniably prominent in the numerous letters of her later years. 'Sorrow, not hope,' she says, 'is the color of old age.' Her sorrow never has the taint of petulance or pitiful complaining. It is even penetrated with a sweet kindness which often amounts to sunshine. But the sorrow is there, deeply motivated and all-pervading.

To her clear vision it seems that all things are falling away from her. Society? The contact with her fellows had never been the chief thing in her life. Now the few she loved are gone or going, and the many who used to excite a vague curiosity have such different ways and thoughts that she can hardly understand them any more. Her last years were passed in the Manse, at Concord, the dwelling of her husband's forefathers. The Manse was then, as it has always been, widely hospitable, and the hurry of eager feet often passed her threshold and the door of her quiet chamber. She listened to it with sympathetic tenderness, but her interest faded with the fading years.

Religion? Religion had melted for her into a great love. But of active beliefs she cherished few or none. The days of strenuous thought and fierce probing of impenetrable secrets were over. She would gladly put aside the little child's questions, if she could

have the little child's peace. 'How well it is that the world is so large, that lichens grow on every tree, that there are toadstools as well as sermons for those that like them.' Newspapers? She had rarely read them in her most active days. She could find little interest in them now. Even the turbulence of the Civil War touched her but slightly. She had drunk deep of the horrors of the past and hated them. Why should she revive their torment in the present? The war, she writes, 'sits on me as a nightmare.' But like a nightmare, she shakes it off when she can.

Study? Ah, that alone is still real, as always. And she would have echoed the phrase that Sainte-Beuve loved, 'On se lasse de tout excepté de comprendre.' 'Thank Heaven,' she says, 'I led a lonely life of study in my youth and return to its rest with satisfaction.' The books on her shelves are friends and companions who will not desert her. 'When I am alive I hold audience with Plato, and when I am not, I gaze on his outside with delight.' She learns Spanish by herself at seventy and reads *Don Quixote* with relish, complaining only that the pronunciation is beyond her. Yet, after all, even books afford but a pale consolation, when life is behind instead of before. And in a dull, dark moment she confesses that she reads mainly to kill time.

As the years grow shorter and the hours longer, the one thing that she falls back upon more and more is the affections of the home. Her memory fails her, her great mental powers no longer sustain her. But, in noting this, she observes, with touching pathos, 'I may be childish, but there are no limits to love.' In her active years she had never depended upon those around her for comfort or for diversion. To her sister-in-law, who remarked that she was contented only when she had all her children in the room with her,

Mrs. Ripley said that she did not require her children's presence, so long as she knew that they were happy. But as time flowed on, her heart turned more to the contact of those she loved. It pleased her to be busy for them, when she could, though she deplored the weakness and ineptitude of age in this regard. 'It seems strange that I that have so little to do, should do that little wrong.' It pleased her to have them about her. She writes to the daughter she loved best, with winning tenderness, 'I feel a want unsatisfied, and I think it must be to see you. Now this is somewhat of a concession for one who has always professed entire independence. But there is often, nowadays, a solitude of the heart which nothing can fill except your image.'

She loved to hear the prattle of her grandchildren, to watch their pretty, wild activities, as if they were creatures of her dreams. So they were, and she regarded them, as she regarded the whole world and her own soul, with a sad and gentle curiosity. In such a tender atmosphere of thought, of love, and of memory, she faded away, in the spirit of the beautiful words which she herself wrote not many weeks before the end: 'We have kept step together through a long piece of road in the weary journey of life: we have loved the same beings and wept together over their graves. I have not your faith to console me, as they drop one after another from my side; yet my will, I trust, is in harmony with the divine order, and resigned where light is wanting. The sun looks brighter and my home more tranquil as the evening of life draws near.'

III

Now, to consider Mrs. Ripley as she was in her best years, from thirty to sixty, with all her wealth of spiritual

power and practical usefulness. We find, of course, the same qualities that we studied in her youth, but amplified, enriched, and balanced by the full development of maturity and a broader contact with the world.

And first, the wife and mother and housekeeper. It must be admitted that Mrs. Ripley's natural tastes did not lie in this direction. All the more notable is it that she was as admirable and successful here as in more abstract and ambitious pursuits. She herself recognizes amply that in giving up her cherished interests for a life of active usefulness she had found gain as well as loss. 'I once thought a solitary life the true one, and, contrary to my theory, was moved to give up the independence of an attic covered with books for the responsibilities and perplexities of a parish and a family. Yet I have never regretted the change. Though I have suffered much, yet I have enjoyed much and learned more.' And housekeeping for her meant, not a ladylike supervision, but hard, perpetual labor. She rarely had a servant, she had many children, she had large social obligations, and for years she had the needs of a boys' school to provide for. Whatever her life lacked, it was not activity. The fret, the wear, the burden of all these cares she undoubtedly felt, especially as her health was never of the best. Sometimes she longed unutterably to be free and quiet. But she never complained, she never grew sour or querulous. Says one who knew her and loved her, 'In all the annoyances of an overtaxed life I never saw her temper touched. She did not know resentment; she seemed always living in a sphere far above us all, yet in perfect sympathy.'

As a wife and mother she did her full duty as if it were a pleasure. The affection, almost devotion, with which her husband speaks of her is sufficient

evidence as to her relation to him. I have already said that she did not depend upon her children for amusement; but she watched over them and entered into their lives as only her intelligence could. Her methods of training and education were those of sympathy and kindness, and better testimony to their success could not be afforded than the noble qualities and eminent usefulness of her sons and daughters.

No account of these middle years of Mrs. Ripley's life would be complete without an analysis of her contact with the world, with her fellow men and women. In one way her career was an isolated, or at least a limited one. She never traveled, knew nothing even of her own country outside the circle of her immediate surroundings. Books and talk, however, gave her a far wider knowledge of mankind than this would promise. And, though she did not go to the world, the world came to her. Her father's houses in Boston and Duxbury were always open to friends and neighbors, and during her husband's long ministration in his Waltham parish, she kept up a hospitality which never failed or weakened. All sorts of people were welcomed in her parlor, and if her thoughts were often called away to other higher or lower cares, she did not show it and her visitors never knew it.

This is not saying that her duties were not sometimes irksome. Occasionally, in her most intimate correspondence, she rebelled and uttered what she felt. 'I would there were any hole to creep out of this most servile of all situations, a country clergyman's wife. Oh, the insupportable fatigue of affected sympathy with ordinary and vulgar minds.' Yet an impatience like this was but momentary, and was in no way incompatible with the social charm which I have already indicated in Mrs. Ripley's youth, and which continued and increased with age. She

certainly did not seek society, in fact preferred the multitudinous solitude of her own thoughts; but neither did she avoid her fellows, and when with them she had always the supreme attraction of being wholly and perfectly herself. There was no affectation, no convention in her manners or in her talk. She said what she thought, and, as her thoughts were wide, abundant, and original, her conversation could not fail to be stimulating. She was, indeed, more interested in the thoughts of others than in her own, and never permitted herself to be burdened with the demands of making talk where there was none.

The shyness of early years persisted in the form of quiet self-effacement. In the words of one who knew her well, 'Without being precisely shy, she often gave one the impression of an unobtrusive, yet extreme solicitude to be in nobody's way.' And this is not the worst of social qualities. It must not, however, in Mrs. Ripley's case, suggest dullness. When she did speak, it was with the ease and the fertility of a full soul. To Dr. Hedge it seemed that she had 'an attraction proceeding from no personal charms, but due to the astonishing vivacity, the *all-aliveness*, of her presence, which made it impossible to imagine her otherwise than wide awake and active in word or work.'

Yet even so, I have not quite portrayed the singular candor and impersonality of Mrs. Ripley's spirit. Her lower self did not exist for her; that is, she left it to regulate its doings by an exquisite instinct, without cumbering her soul with it. When her friends, in jest, engaged her in speculative talk and then put a broom in her hands and asked her to carry it across Boston Common, she did it quite without thought. In the same way, she carried her own external, social person through life, bearing it with the flawless and unflinching dignity that belonged to high

preoccupations, and so making contact with her one of the privileges and delights of all she met.

Among the activities of Mrs. Ripley's prime none is more illustrative of her character than her teaching. She taught boys for many years, sometimes as an assistant in her husband's boarding-school, or again simply taking pupils to tutor in her own house. I find very little evidence that she enjoyed the work. Of course, there was the rare pleasure of really waking up a soul, knowing and seeing that you had done so. But the teacher was too self-distrustful to take much credit, even in such cases. She hated all responsibility — how much, then, the responsibility of a young life. She hated drudgery, of body or soul, though her whole long existence was made up of it. And whatever pleasure there may be in teaching, few will deny that there is drudgery also. Especially she hated discipline, believed at least that she had no faculty for it, and refused to practise it in any harsher sense. It is said that, as she sat in her teacher's chair, she knitted assiduously and purposely, so that small infractions of propriety might escape her notice. It is said, also, that when such things were forced upon her, she made no comment at the time, but afterwards wrote gentle, pleading notes to the culprits, which never failed of their effect.

For, whatever she may have felt herself, her pupils thought her eminently successful as a teacher. They learned from her, they obeyed her, they admired her, they loved her. No one affords better evidence than she that the stimulus of the soul goes further than the stimulus of the rod. Most of her boys were rich, idle fellows, who had been suspended from college or had never been able to get there. Such hearts are not always bad, but you have got to touch them to help them.

On this point I do not know that I can quote better testimony than that of Senator Hoar. He says of the pupils who came to her from college: 'She would keep them along in all their studies, in most cases better instructed than they would have been if they had stayed in Cambridge. I remember her now with the strongest feelings of reverence, affection, and gratitude. In that I say only what every other pupil of hers would say. I do not think she ever knew how much her boys loved her.'

I cannot leave Mrs. Ripley's teaching and practical usefulness better than with the pathos of that last sentence.

IV

There is no doubt that the chief interest of Mrs. Ripley's best years, as of her youth, is in her intellectual preoccupations. It is true that she theoretically subordinates such preoccupations to useful action, but her very words in doing this show her attitude. 'I sympathize much with your tranquil enjoyment in study. There is no enjoyment like it, except perhaps disinterested action; but all action is disturbing, because one is constantly limited and annoyed by others.' So, in spite of the immense activity that was forced upon her by her choice of life and her surroundings, she persisted day after day and year after year in grasping more firmly and more zealously the things of the spirit.

Sometimes, indeed, the difficulties were so great that even her courage faltered. 'I begin to think we must either live for earth or heaven, that there is no such thing as living for both at the same time.'

Her health was uncertain; her time was broken, till there seemed nothing left of it; those about her would call her attention to petty details and trifling matters, world removed from

the high thoughts she loved to linger with. It made no difference. The persistence — call it obstinacy — which others expended upon social success, upon worldly profit, upon mere, immediate pleasure, she devoted wholly to books, to study, to vaster acquisition of varied knowledge; and somehow or other she knit up the flying minutes, which many would have wasted, into connected hours of profitable toil.

Note that this spiritual effort was given to intellectual interests pure and simple. Mrs. Ripley had never any great love for the æsthetic side of life. Music, unless as a matter of analytical study, made little appeal to her. Art made almost none. 'I am not sufficiently initiated into the mysteries of art to admire the right things,' she says. Even in poetry her tastes were narrowly limited. The Classics she read because they were the Classics. To the moderns she gave little attention and less care. So with contemporary events. They passed her by almost unnoticed. Her whole thought was given to the eternal.

Note also that she did not study to make a parade of it. She was as far as possible from a pedant in her speech as in her thought. She had no desire whatever to give instruction, simply to get it. Nor did literary ambition enter at all into her enthusiasm. She never wrote, had probably no great gift for formal writing. Her one inspiring passion, from youth to age, was to use every power she had in making just a little more progress into the vast, shadowy regions of obtainable knowledge.

As I have already pointed out in connection with her young days, her intellectual appetite was universal in its scope. It almost seemed as if she did not care upon what she used her mind, so long as she used it. The truth was, that every study was so delightful that choice was hardly neces-

sary. Language? All languages fascinated her, and she grasped eagerly at every one that came within her reach. The ethereal flights of pure mathematics and astronomy might have absorbed her altogether, had it not been that chemistry and botany offered attractions so perpetually and variously alluring. The close contemporary of Thoreau, she had none of his imaginative interpretation of the natural world; but it is doubtful whether his actual knowledge of plants and trees was more exact than hers.

On the whole, it must be said, however, that her chief interest was in philosophy and abstract thought. The intense preoccupation with heaven and hell which beset every New England childhood in those days, turned, with her, as with so many others, into a close and keen analysis of where heaven and hell came from — and where they had gone to. She read the Greek and the English and the German philosophers and meditated upon them, with the result of a complete, profound, and all-involving intellectual skepticism. Observe that this skepticism was individual, not general. She was no dogmatic agnostic, no blatant unbeliever; above all, she abhorred the thought of leading any other astray. She was simply a humble, gentle, reverent seeker, ever anxious to know whether anyone had found the light, but irrevocably determined to accept no false gleam, no deluding will-o'-the-wisp.

Even in face of the great mystery of all she would express only a deep resignation, making no pretense to a confidence she could not feel. 'Death is an event as natural as birth, and faith makes it as full of promise. But faith is denied to certain minds, and submission must take its place. The Unknown, which lighted the morning of life, will hallow and make serene its evening. Conscious or unconscious,

we shall rest in the lap of the Infinite. Enough of this. Let us live while we live, and snatch each fleeting moment of truth and love and beauty.'

It may easily be maintained that Mrs. Ripley carried intellectual sincerity too far. She was so conscientious that she made a dogma, and finally even a duty, of doubt. She too often overlooked the blessed privilege of thorough skepticism, which is that it leaves hope as permissible as despair. Yet such singular, lucid, unflinching devotion to pure truth is highly notable in any one. I do not know whether a man may be forgiven for assuming that it is especially notable in a woman.

It is in this connection that I find a peculiar interest in Mrs. Ripley's intimacy with her nephew by marriage, Emerson. It would seem as if the two must have been an infinite source of stimulus and solace to each other. That there was always the deepest affection and respect between them is perfectly evident. When Mrs. Ripley refers to Waldo in her earlier letters, it is as to a spirit inspired and almost super-earthly. And in her old age she writes of his absence, 'I miss my guide and support in many ways.' Emerson's tone is no less enthusiastic, not only in the eulogy of his friend published soon after her death, but in many passages of his *Journal*.

Yet, with all this, one is rather surprised to note that the two seem to see little of each other, do not seek in each other's society that constant sympathy that one would think they would have found there. The truth is, their ways of looking at life were radically different. Mrs. Ripley records a conversation between them in which she remarked that 'the soul's serenity was at best nothing more than resignation to what could not be helped'; and Emerson rejoined, 'Oh, no, not resignation, aspiration is the soul's true state! What

have we knees for, what have we hands for? Peace is victory.'

This difference of attitude peeps out slyly in a touch here and there in Mrs. Ripley's letters. It is glaringly marked in the study of her, printed at large in the sixth volume of Emerson's *Journal*. He does, indeed, repeat, with entire sincerity, much of his former praise. But he adds these somewhat harsh comments: 'She would pardon any vice in another which did not obscure his intellect or deform him as a companion. She knows perfectly well what is right and wrong, but it is not from conscience that she acts, but from sense of propriety, in the absence, too, of all motives to vice. She has not a profound mind, but her faculties are very muscular, and she is endowed with a certain restless and impatient temperament, which drives her to the pursuit of knowledge, not so much for the value of the knowledge, but for some rope to twist, some grist to her mill.'

Few spiritual touches could be more instructive than this conflict of minds so akin in many interests and so closely thrown together. A certain justice in Emerson's complaints is undeniable. Mrs. Ripley's was in no way a creative, original intelligence. She knew that it was not, and perhaps we may say, did not wish it to be. Her mental activity does at times appear an effort at diversion and distraction, rather than a passionate struggle toward the ultimate ends of thought. Yet it is hard to be satisfied with Emerson's criticism, when one reads passages like the following: 'Religion has become so simple a matter to me — a yearning after God, an earnest desire for the peace that flows from the consciousness of union with him. It is the last thought that floats through my mind as I sleep, the first that comes when I wake. It forms the basis of my present life, saddened by past experience. It bedims

my eyes with tears when I walk out into the beautiful nature, where love is all around me. And yet no direct ray comes to my soul.'

The true cause of the difference between Mrs. Ripley and Emerson was that her unconquerable, uncompromising dread of illusion did not suit his persistent and somewhat willful optimism. The lucid shafts of her penetrating intelligence drove right through his gorgeous cloud-fabric. Doubtless she listened to his golden visions with the profoundest attention and respect. But she was ten years older than he, she had known him as a boy and from boyhood, and she read the boy in the man and the angel, and he knew shedid.

I have no direct evidence whatever, but I am inclined to suspect that she regarded those eager pages, peppered with capitalized abstractions, as Waldo's pretty playthings, which amused Waldo and could hurt nobody.

Emerson's verdict on Mrs. Ripley's moral character also, if not unjust, is misleading. It might naturally be expected that skepticism so complete would have some moral effects; but in this case those mainly perceptible are a divine gentleness and tolerance. Theoretical disbelief is apt to blight action. But action was so forced upon Mrs. Ripley all her life, that she could neither shun it nor neglect it. As to her moral instincts, Emerson himself indicates their sureness and delicacy. They never failed her in any connection. It was far more than a negative correctness of conduct. It was the most subtle and pervading sympathy with purity, holiness, and sacrifice, wherever they might be found. Above all, there was in her letters as in her life — and this Emerson fully recognizes — a singular tenderness, a pervading grace of comprehension, that endeared her to

all who knew her. And hers is the saying, notable in one who so greatly prized all honesty and veracity, 'The law of love is higher than the law of truth.' In short, it may well be said that she believed in nothing but goodness, kindness, the dignity of virtue and the unfailing delight of the pursuit of knowledge. Even as to these things she had her doubts, though they were clamped with iron tenacity to the inmost fibre of her soul, as to the existence of which she doubted also.

But, however great the charm of Mrs. Ripley's pure and saintly external life, the chief interest of her character, and of her example, must always lie in her extraordinary devotion to intellectual matters. It is to be observed that from her childhood to her age this devotion was absolutely disinterested. Most men who make a business of study combine it with some ulterior object, either professional success, or financial profit, or the glory of literary achievement or of scientific discovery. This woman never entertained the slightest suggestion of such advantage. With her there was but one aim, the pure exercise of thought for itself, the perpetual probing a little deeper and a little deeper and a little deeper into the vast, elusive mystery of existence. Such a tremendous and unceasing voyage of discovery carried its own triumph and its own satisfaction with it, and its resources of desire and delight were as varied as they were inexhaustible.

In Pater's *Imaginary Portrait*, Sebastian van Storck says to his mother, 'Good mother, there are duties towards the intellect also, which women can but rarely understand.' No man ever understood those duties to the intellect better than this woman understood them.

JANE ADDAMS

BY RUTH COMFORT MITCHELL

REMEMBER Botticelli's Fortitude

In the Uffizi? — The worn, waiting face;
The pale, fine-fibred hands upon the mace;
The brow's serenity, the lips that brood,
The vigilant, tired patience of her mood?
There was a certain likeness I could trace
The day I heard her in a country place,
Talking to knitting women about Food.

Through cool statistics glowed the steady gleam
Of that still undismayed, interned desire;
But — strength and stay, and deeper than the dream —
The two commands that she is pledged to keep
In the red welter of a world on fire,
Are, 'What is that to thee?' and 'Feed my sheep!'

HISTORY — QUICK OR DEAD?

BY WILLIAM ROSCOE THAYER

I

A CRITIC, reviewing my biography of Cavour, said in substance: The author plunges us back into the very life of the period he describes. He makes us feel the passions of the persons great and small who played in the drama of the Risorgimento. We are infected by their prejudices; we take sides; we almost forget ourselves and become, temporarily, a part of the titanic conflict. This is not History.

Such a frank assertion forces us to ask, What is History?

The streets of Naples are paved with slabs of lava, quarried at the foot of Vesuvius. If you wished to write an account of an eruption of the volcano, would you visit the Chiaja, notebook in hand, measure the lava paving-stones, analyze them with a microscope, and make any other examination you thought proper; or would you assemble all the reports of witnesses of the eruption; climb Vesuvius itself; trace the streams of lava; look into the crater; observe the changes caused by explosions and by the caving-in of walls; and so saturate yourself with the records and the setting of the event that it became real and living and visible to you? Only on these terms can you make it real and living and visible to your readers.

But my critic declares that history must be dead, and there can be no question that a great part, perhaps four fifths, of the history written up to the present time has been dead.

Still, may there not possibly be need, and perhaps an opening, for a minimum of live history? May we not, by accepting too narrow a definition, shut out one branch of history which not only has a right to exist but does exist, and may bear under favorable conditions the finest fruit on the tree? The penalty of exclusiveness is deprivation. We ought to recognize that the writing of history embraces work of many kinds, some higher, some lower, all honorable, all necessary. But this recognition must not blind us to the fact that there is a distinction between the lower and the higher. The architect who designs a cathedral is held, deservedly, in far different esteem from the masons who lay the physical foundations, or the hodmen who carry the mortar to bind stone on stone.

Speaking broadly, historical workers may be divided into two great classes — first, the men whose interest lies chiefly in *facts*; and next, the men who, having ascertained the facts, cannot rest until they have attempted to interpret them. These two aims — information and interpretation — should not be regarded as mutually hostile, but as mutually complementary.

The worship of Fact, which must not be confounded with Truth, does not lead us far. To know that Columbus discovered America on October 12, 1492, or that the Declaration of Independence was made on July 4, 1776, or that Napoleon lost the battle of Waterloo on June 18, 1815, is interesting; but unless these statements are reinforced

by much matter of a different kind, they are hardly more important for us than it would be to know the number of leaves on a tree. And this is true though the facts be indefinitely multiplied. I have read, for instance, an account of the American Revolution in which the uncontroverted facts followed each other in as impeccably correct a sequence as the telegraph poles which carry the wires over the eight hundred and fifty miles of the Desert of Gobi. The paramount interest in this case is not the number of poles but the purport of the telegrams flashed along the wires.

That may symbolize the difference between the historian of Information and the historian of Interpretation. Not for a moment, of course, does anyone deny the usefulness of the former. But we shall not be able to penetrate far into Man's historic past by the method of counting telegraph poles or of measuring the distance between them. The message borne by the telegram, the meaning of the sequent or scattered events in any historic movement, be it of long duration or merely a fleeting episode — that alone can have significance for us.

Viewed thus, history is a resurrection. The dead actors in remote dramas come to life; the plot, the meaning emerge, as when an electric current is turned on and lights up the pieces of fireworks set in many patterns. In one sense history resembles an autopsy, for it usually deals with cadavers; but whereas the physician makes his post-mortem to see what the patient died of, the historian examines, or should examine, to discover how his subjects lived. Life, evermore Life, is the imperial theme for those who live; Life, in which Death is the inevitable incident, often tragic, sometimes pathetic, but never so significant as Life. The maladies of nations and of institutions, and even

the diseases of which they died, form much of the material of history; but you cannot isolate them from the large living organism in which they appeared. Gibbon followed through thirteen hundred years the decline and fall of the Roman Empire; and yet each symptom of imperial decay which he described coincided with signs of the growth of new forces, new states, new ideals; so that you may read his monumental and matchless work either as a funeral oration over the grandeur that was Rome, or as a chronicle of the springing into life of the world of Christendom which replaced Rome.

Without a sense for transformation we shall not come far, either as students or as critics of history. Gibbon possessed that sense in a superlative degree, although he emphasized the negative transformation of dissolution, instead of its positive counterpart, which traces all the stages from birth to prime. There will be no more Gibbons, because the accumulation of material would crush any daring persons who should attempt to survey history by the millennium, as he did; but no one deserves to be called a historian who lacks this sense.

In the world of nature outside us, vast processes are continuously going on — an endless dance of atoms; a passing out of one thing into another, and from that to a third; a hide-and-seek of phenomena; night chasing day; the fruit replacing the flower; the stalk, yellow with full-eared corn one week, stubble the next; fruition only another name for beginning, for a new seed-time; and so on forever with this cosmic transformation, in which the sun also and the stars take their turn, on a scale beyond our human comprehension. And in this protean masquerade, forces do not act singly, but several may work through the same body simultaneously, each toward a different end.

Until you perceive that mankind, like inanimate matter, is the medium through which a similar array of intellectual and moral forces shuttles, perpetually, you will get nothing from history except the foam and bubbles that float on its surface. It is because these forces, which are often mutually repellent or seem to neutralize each other, pursuing their way at different rates of speed, and apparently capable of unnumbered transformations, never stop, that Life, manifold and complex Life, is the substance of human history: and the representation which the historian makes of any fragment or series of this boundless evolution must possess, first of all, life, the stuff out of which the original flows.

We need have no fear, therefore, that a history can ever be too lifelike. Compared with the actual which he wishes to portray, the utmost the historian can compass is like an eight-by-ten-inch painting of Niagara to the Falls themselves. He must use the devices which Art supplies, in order to represent his subject on such a scale and in such a manner that it will make on the mind of his readers an impression equivalent to that made by the original. The art which the historian must employ is Literature — the art of conveying by words, in the best way, human facts, ideas, and emotions.

Whoever uses speech, written or oral, must obey the laws of speech; he cannot claim exemption on the ground that he is a 'scientific historian,' amenable only to the laws of science. For every man of science, if he treat his special subject by writing, and not by technical symbols and diagrams, is bound by literary laws. It makes no difference whether you put out to sea in a dory or in an ocean liner, the laws of flotation will inexorably govern you. Protesting that you are a landsman and not a mariner — a devotee of Science

and not of Literature — will not save you from capsizing. That the large concerns of science may be treated with literary excellence without losing their scientific quality, the works of Buffon, Faraday, Darwin, Huxley, and Tyn-dall show.

The war which once raged over the question whether History is a science seems to have reached a truce — the truce of indifference, in which each side is attending to its business as if peace were restored. Like the ancient feud of the Classicists and the Romanticists, this also tends to reduce itself to a matter of terms. If you mean that history is a science like chemistry or optics or algebra, you mistake. The algebraic formulas were as true in B.C. 5000 as they will be in A.D. 5000. You can predict that the molecules of hydrogen and oxygen, combined in the same ratio, will always form water. But you can predict nothing about the action of human ingredients. On the afternoon of April 14, 1865, nobody foresaw that within the next twelve hours Abraham Lincoln would die by assassination; nor could the effect of his death be foretold. None of us knows what will happen next week, much less next month or next year. This ignorance is not science: it renders science impossible.

So we must abandon the delusion that history can be a science: for science deals with elements which are constant and verifiable, while history deals with human motives and will, and the atoms — that is the individuals — which compose society. These can never be completely measured, nor do they combine with or react on each other in precisely the same way. Even if it were possible to get a formula for an individual in his normal state, we should still be unable to guess what he would do if he suddenly went crazy. Molecules of oxygen never go crazy: the

chemist knows how they will behave under any given conditions. This liability to insanity is only one of a thousand facts which prove that human beings cannot be 'explained' by the laws which govern material atoms.

II

But though history can never be an exact science, the historical student will follow the scientific method in his investigations. He will search for his materials as patiently, analyze them as carefully, and draw his conclusions from them as candidly as the chemist does his materials. He has no instruments of fixed capacity to work with. His insight and judgment must serve him instead of microscope or burette, blow-pipe or acid test.

We must not forget that the partisans of history as a science are inspired by the noblest motive—the sense of justice. Except duty, no other attribute is so august as justice, no other demarks so clearly the difference between man and animals. The beasts of the field share with us, according to their kind, love and hate, courage and fear; they are sly and mean, they are cruel; but, so far as appears, they are unmoved by any desire for justice for themselves; nor do they question the Universe. Even among men, this desire developed late, and the cheeriest optimist would hardly claim that it has yet dominated the dealings either of individuals or of nations with each other.

Under one aspect, justice is at the heart of every modern religion. From Job to Milton, and so on down to today, thinkers and moralists — and how many perplexed nameless souls besides? — have busied themselves trying to justify the ways of God to men! The entrance of morality into human affairs brought with it the recognition of jus-

tice. When lightning sets fire to a house, or earthquake destroys thousands of human beings; when a tiger leaps upon and slays a huntsman, or a pernicious microbe spreads an epidemic over a whole city, the man of science, unless he be unscientifically eager to prove a pet theory, will record the happening without bias. It is unmoral, — even the legal fiction which regards unpreventable natural calamities as acts of God does not give a moral complexion to them, — and he remains dispassionate. But suppose an incendiary started the fire, or that an anarchist set off the bomb which killed a crowd, or that a highwayman garrotted a passer-by, or that a German poisoned the milk-supply — the case would be altered completely. The act would be human; we should examine it under its moral aspects; and Justice, seeking to appraise it, would go behind the legal fact, to determine, if possible, the motive.

So we are brought back to my earlier remark, that motives constitute the ultimate stuff of history. Motives, of course, presuppose a *moral* standard. The scientific historian sets up the judge as his model because he reverences fairness, impartiality: but perhaps he fails to see that the judge himself is already biased, being bound to investigate each case and to interpret it according to existing statutes. In this respect the man of science does not differ from the judge.

Is not the chemist also bound rigidly by laws? Does he not try, by every device, to lessen the possibility of error which may lie in his personal equation? And yet what are his laws, or the judge's, or those of moralists and of priests, but conclusions reached and demonstrated by their forerunners and accepted by their fellows?

The 'personal equation'! Is it not just that, if it be of the proper kind,

which makes the great discoveries? How many million apples had dropped meaningless to the ground before the one which fell within sight of Newton? And what except Newton's personal equation made that the most significant apple in history? And what makes an opinion handed down by John Marshall a law which will bind men as long as they acknowledge its force — what but his personal equation?

If this personal equation plays such a part in matters as positive as the physical sciences or the law, how much more must it influence the work of those who deal directly with human nature — that elusive, erratic, volatile, protean substance, which is, notwithstanding, the most enduring of all? When we come to the arts, — to music, poetry, painting, — the personal equation *is* the artist. And how often is this true in medicine, where the master of diagnosis perceives, as if by divination, the cause of a disease, which his colleagues, equally learned as he in medical laws and practices, had been blind to?

By this road, too, the road of science, we arrive at *Interpretation* as the highest office of the historian. And how could it be otherwise, since History most nearly concerns the motives and deeds of men? What the scientific historian means is that historians should aim at the fairness and impartiality of a judge, and should employ the scientific methods of investigation which promote the highest accuracy. To this, we all say Amen. The ideal was not invented by Ranke or any other modern: it has inspired every true historian since Herodotus. Do you suppose that Thucydides was not immensely concerned to know and state the truth? Do you suppose that the contemporary professor of scientific history, who, in his effort to depersonalize and dehumanize himself to the level of a material instrument, puts on an asbestos shirt,

to keep enthusiasm from leaking out or in; who stuffs his ears with cotton, wears goggles of a neutral tint, and has non-conducting glass castors to his chair; who dips his pen in colorless ink, subjects his papers to a formaldehyde bath, and keeps a carbolic spray playing in his study — do you suppose that he succeeds in eluding *his* personal equation? Far from it: all his attempts to depersonalize himself simply record the limitations of his personality.

In our daily life, if anybody adopted these methods toward us, do you think that he would get within recognizing distance of your heart or mine? Does such a nature inspire confidences? You smile. And yet there are doctrinaires who suppose that the people of history — who were at least as human as we — can be understood, measured, explained (if you will) by men and methods before whom you and I would remain unresponsive and dumb.

The other day I read the report of a lecture by a professor who said that it was not the business of the historian to be interesting, all that he has to do is to describe events as they really happened. Remarks like this shake our faith in the mental capacity of the scientific historians. Translate the professor's saying into the terms of another art, if you would see their absurdity. Imagine a painter telling his pupils, 'Color does n't matter, perspective does n't matter, drawing does n't matter; your whole business is to paint the portrait or landscape just as it is.' I decline to use the epithet which his brother artists would deservedly apply to one who should utter such nonsense; and yet I regret to say that the warning — 'Don't be interesting' — stands high up among the articles of the creed of the scientific historians. The humor — or the pathos — of it is that seldom has a warning been so little needed.

What conception of human nature

must a professor have who warns his pupils against being 'interesting'? Does he suppose that Thucydides, or any other historian, murmured to himself before sitting down to write: 'Go to! I will be interesting'? Can those who have it not, simulate charm, or those who have it, hide it? Can November's stubble fields and stripped branches simulate the bloom of May or the exuberant leafage of June?

'Just describe events as they really happened' — could anything be more naïf? That is the tantalizing task of the historian as it is of the portraitist. But no two persons see an event or a face from exactly the same angle, with identical eyes, much less with identical preparation. One sees color, the other sees form; one divines character, the other trusts to documents. Rembrandt and Van Dyck paint the same person: which portrait is right? In truth, half a dozen might be right, if they were painted by masters of equal, though varying glories.

III

So no history is final. How can there be finality to anything that touches us mortals who, like amphibia, move in two worlds — the Finite and the Infinite? The Stream of Time bears us onward, like the first voyagers on the River of Doubt. We know not what lies ahead. We are absorbed by the country on either bank. We have survived rapids, cataracts, falls; and as we look back, the receding landscape takes other shapes. What seemed yesterday a mountain range has melted away; cliffs that we thought an impassable barrier before we came to them, divided and let the stream and us through. Mankind sweeps on, and with each advance its perspective changes and shows historic personages and events in different size.

Perspective! that is the historian's compass. Without it, he will magnify the trivial and slight the significant. I am not sure that it can be taught. For lack of it, Kinglake, who possessed many rare qualities as a historian, devoted eight volumes to the Crimean War and four hundred and fifty pages to the battle of Inkerman. An American who should summarize our War of 1812 and the Battle of Lundy's Lane on that scale would be laughed at; and yet, war for war and battle for battle, the American was at least as important as the European.

Perspective implies election, to make which will call on every native or acquired trait you have. But instead of drawing up a list of the qualifications of a historian, I will read you one made long ago, and apparently forgotten.

He is requir'd to be a Man born with all the Felicities of a lively penetrating Wit, and unbounded Genius: Formed by great Study, Experience and Practice in the World; one that is both a Scholar and a Man of Business; a good Geographer, Chronologist, Antiquary, Linguist; conversant in Courts, Councils, Treaties, in Affairs Military as well as Civil, and in short in every thing that is the Subject of History; furnish'd with all proper Materials and Records, and a perfect Master of all the Graces of the Language he writes in. This is a great deal, but not enough; for what is yet more extraordinary, he must have no Passions or Prejudices, but be a kind of Deity that from a Superior Orb looks unmov'd on Parties, Changes of State, and Grand Revolutions. And yet you are to suppose him bless'd with Health, Leisure, and Easie Fortune, and a steadfast Application to his subject. After which, the Perfections requisite in his Performance are almost innumerable; a judicious Proportion of all the Parts of his Story; a beautiful Simplicity of Narration; a noble, yet unaffected Stile; few and significant Epithets; Descriptions lively, but not Poetical; Reflections short and proper; and lastly, besides a multitude of Particulars which

cannot be mentioned here, a good Conduct thro' the whole, and an animating Spirit that may engage the Reader in every action as if personally concerned, and give him the firm assurance that he sees things in their own Light and Colours, and not in those which the Art or the Mistake of the Writer has brought upon 'em.

That was not written recently — as the firm yet rich texture of the language and the continuous robustness of the thought reveal; but could any teacher of history to-day define better what a historian should be? Our contemporary would probably leave out 'the lively and penetrating Wit,' and the training which included 'Experience and Practice in the World'; as well as those preparations which form the masterly writer. For even in the literary courses our universities teach much about the art of fiction and the trick of writing short stories, but little about the fundamental art of expression; and in the history courses, the shovel and pitchfork have usurped the place of a 'penetrating Wit,' and of 'a noble yet unaffected Stile.'

The distinguished professor mentioned above warns his pupils against being interesting. Bishop Kennett, whose great passage I have just quoted, published his *Compleat History of England*, to which it serves as a preface, in 1706, when he was about forty-six years old. If we were to judge him and the contemporary professor by their expressed ideals, we should conclude that the Queen Anne man had vision, while our contemporary, steeped in Germanizing erudition, has none.

Happily, we are not always as bad as the doctrines we profess. Some 'scientific' historians who shudder at the thought of being 'interesting' are read because, in spite of themselves they have literary aptitude; some 'literary' historians are welcomed even in the ranks of the Philistines. The greatest

surprise of all awaits the American who is taught to go to the German for models of scientific objectivity. He goes, and finds them anything but objective: he finds Treitschke a glorified partisan pamphleteer, Von Sybel a subsidized eulogist of the Hohenzollern dynasty, and even Ranke and Mommsen taking little pains to disguise their prejudices. All of which means that the instrument, being human, will more or less affect the work it produces. Were it otherwise, it might be possible to degrade man to the level of a machine, as soulless and as correct as a cash-register.

Contemporary verdicts and statements are proverbially incomplete, if not inaccurate or downright false. Therefore, argue the advocates of dead history, history must be written after the evidence is all in, as a lifeless chronicle which is as irrevocable as the entries in the Book of Judgment. To this the believer in quick history replies: all that the accumulation of evidence has done has been to put us — years, or, it may be, centuries after an event — into the position of an omniscient contemporary observer. We know both sides, all sides, better than the actors themselves could know them. Our increased knowledge enables us to see a living picture of the event, to appraise the motives of the men and women, to see how the episode fits into the larger sequence of history. Until a historian looks upon his testimony as alive, he cannot present it truly — for life is the fundamental truth underlying human facts. To suppose that by regarding his material as dead the historian will be more likely to tell the truth is a delusion. The quality of truthfulness is in the man — not in the material.

Turn over the pages of any life of Mary Stuart if you would disabuse yourself of the idea that even the advocates of dead history are out of danger of being galvanized into a simulation of

life. To come at any decision of your own in regard to a still vaster subject — Napoleon — you must read not only the documents, but his chief defenders and his chief detractors. His manners had their bearing on his career: does Madame de Rémusat or Alfred Lévy tell the truth about them, or do both?

If you are really bent on getting to the source of a man's life, or of an historic episode, you will very soon discover serious gaps in the evidence, and then you will be surprised to find that a historian as rigidly 'scientific' as Freeman takes you comfortably over the chasm of ignorance on a bridge of conjecture. This too is a tribute to history as an art: for Freeman's conjectures, coming from his wide erudition, and fused in his passionate mind, are often worth more than other men's facts. He conjectures valiantly, and scorns to prefix to his statements the specious 'perhaps,' by which nowadays timid historical writers hope to preserve their reputation for impartiality.

After all, if a man write honestly, his personal bias will never deceive his readers. Only those — and they are wretches, indeed — who falsify or omit or garble the evidence, do harm, and they are perjurers, not historians. I do not believe that anybody was ever misled by Macaulay's Whiggism, or by Gibbon's skepticism, or by Carlyle's hero-worship, or by Treitschke's magnification of Prussian absolutism. And why should we not wish to hear the opinions of masterful men in regard to important historical events? In literature, we set the highest value on what Sainte-Beuve thinks of a book or of an author. The masters of literature stand each for some unborrowed point of view. Thackeray, Dickens, George Eliot, Meredith — we would not have them alike; each sees Life originally, and tries to describe it honestly, and so adds to our knowledge of it.

In its more recent manifestation fiction seems to be so closely engaged in a competition with the kodak that it matters little who writes it: for the personality of the man who holds the camera counts for little. But some of us still prefer a painting to a photograph or a snapshot: not only because a painting has color, but because it has the personality of the painter behind it. We know that Rembrandt or Turner put on his canvas something that the photographic plate could not see.

I say this, not to urge that the historian should make a purely subjective figment of his material, but to remind you that the personal equation may — nay, must — determine the value of the completed book. Whatever be our theories which our practices may improve on, no man fit to be called a historian ever finished his work without feeling the inadequacy of his own powers, or of any conceivable human means, to reproduce the little fragment of history which he has chosen. And no historian can work far or deep without being conscious that he is reporting from the heart of human life matters too sacred to be twisted in the narration to suit his private opinion. He is conscious of the manifestation of mighty forces — of forces mightier than those which drive the Mississippi from Minnesota to the Gulf or which swing the oceans to and fro in their tidal pendulation. He feels, though he cannot see, Presences which lead the actors of the everlasting human drama on and off the stage; Spirits which teach them their parts and prompt them when they falter; Furies which pursue, punish, and avenge; Fates which accomplish their tasks as dispassionately as heat or cold.

In the calendar of nature four seasons fill the measure of each year: each merges in the next; and though there may be slight annual variations, no

year passes without completing its circuit of spring, summer, autumn, winter. In human evolution there is no such sequence. If there be seasons, they are of such vast duration that we have not yet observed them. There is no recurrent return to the starting-point. Each race passes through the order allotted for all living creatures: first birth, then growth, prime, decrepitude, and death; but no race, in expiring, bequeaths its hoard to another. Generally, there is the slow obliteration through blending: and where a race grows strong by conquest, its strength is often sapped by the process of merger with the weaker conquered. The Roman Empire was in no sense the heir of Athens; nor Catholic Spain of the Saracens; nor England of the Northmen who, as Normans from France, conquered the Saxon kingdom. Doubtless the new combinations are conditioned by the remains of the old elements, but there is no lineal descent. In races which at different epochs occupy the same region, there is rather such a law of succession as we find among our forests: when the primeval pines go, oaks shoot up; and after the oaks, beeches and birches follow.

What determines the handing on of the torch from race to race? We assume, because we men are incorrigible optimists, that every transmission means advance; but this is not true. Often a race lower in everything except brute force subdues a higher. There is a deeper principle at work. Sometimes the baffled historian concludes that our human life, and that consecutive es-

sence of it which is History, can be explained only by physical reactions. A drought in Central Asia causes the raid of Tartar hordes into Europe, with all that follows; the Venetian Republic languishes and dies because the discovery of a new ocean route diverts the commerce of the world away from her.

But even as he acknowledges these facts, which seem to reduce man to the level of an automaton, the sport of purely material agents, the historian remembers the saints and heroes before whose spiritual potency Matter is as yielding as glass is to sunshine.

This is the high mission of the historian. He starts out to narrate a section of history, aiming only at describing what he sees, without plea or prejudice. Narration is his chief concern, but through it he will reveal, unconsciously it may be, the forces which impel the flow of events, the deeps from which human acts emerge and into which they return and dissolve. He must have no specialty except truth; and yet, though he must write neither as poet nor as dramatist, neither as philosopher nor as man of science, he will need at times the skill of each of them; they will all find in his history, as in life itself, the substance of their specialty. For he is always aware of the Presences — invisible and immaterial — ceaselessly passing, shaping, completing, and renewing: not merely weavers at the loom of Destiny, but Destiny itself — and he seeks in human motives to discover the Transcendent Motive, the Living Will, which causes and sustains the world.

THE MOURNERS

BY MARGARET LYNN

I

'AND — what hour have you set for the service, Mrs. Chase?' asked Mr. Upton hesitatingly. His manner had been hesitant and tentative all through. In all his pastoral experience with houses of grief he had never had an interview more difficult.

'It will be on Thursday afternoon,' said Mrs. Chase quietly and definitely.

Her sister-in-law, playing a subordinate and silent part through the call, made a gesture as though she saw reason for speaking.

The minister forestalled her, though even his response came slowly.

'Mr. Jordan's funeral will be on Thursday afternoon. I don't know whether you have heard — in your own trouble —'

'Yes, I know,' answered Mrs. Chase gently. 'It will be a great loss.'

The marked stillness of her attitude and manner seemed to be a refuge to which she had betaken herself and from which she feared to break away.

'The passing of two men of such prominence so near together was very remarkable,' said Mr. Upton. 'I have never known anything like it.'

He knew the flatness of his remark and the awkwardness of its suggestion, but he was hampered by the difficulty of finding anything right to say. He had visited many widows in their affliction, but none who sat so palely quiet, yet controlled, as this one. Active grief seemed as remote from her as everything else.

The troubled sister-in-law quivered a half-smile, acknowledging his speech, but Mrs. Chase showed no response. She said only, 'What time will Mr. Jordan's funeral be?'

'At two. There are relatives and some public men, I believe, to take an afternoon train.'

'Then would four do? It is late, I know. And would that be too hard for you?'

'That is no consideration, believe me. Your wish and convenience are the only important thought.'

In his embarrassment he clumsily fell into mere social phraseology.

He went on to make competent suggestions for her help — for the form and circumstance with which we pursue the dead with earthly things. His sympathy was urgent, but it furnished him with neither religious thought nor human feeling to meet a grief so complicated and qualified as this. He went away mortified at his own inadequacy. 'And I a minister to souls!' he rebuked himself.

'Might you not have waited, Katherine?' asked the older woman unhappily. 'To put the two funerals side by side, like that —'

'The contrast is there anyway,' said Katherine with a sharp intensity she had not yet shown. 'We can't make it any greater. I won't have any shrinking or hiding about it.'

She made a passionate unpurposed movement, like a demand for escape, and then with abrupt control turned and sat herself down at her desk.

There she stayed until every detail of arrangements had been provided for, she herself directing telephone orders and dictating messages, forcing herself to plan everything on a conventional and consistent scale. There must be, for his sake, no sign of apology or of shamefacedness. It was his last claim on her, and she involuntarily rose to meet it. She took on herself duties that would usually have gone to friends, gently putting aside their offers since she could not guess how willingly or perfunctorily they were made. In the developments of the past week, whom could she ask for the friendly offices and the show of esteem with which we adorn the closing life? How could she know who had been injured, or how far-reaching was the cause of estrangement, or who would be bitterest in condemnation?

It was late in the night, at last, when she put her lists and notes in order on her desk and went up through the thick quiet of the house to the empty silence of her own room. She paused outside the door behind which her husband lay, and stood leaning her forehead against the cool white door-frame. Then, with a profound sigh and slack despairing gesture, she went on her way.

As she closed her door, she seemed to be shutting in with herself a mass of facts and emotions which she must now assort and put into relation. Such a poignant complexity of feeling she had never dreamed of. She wished longingly for a simple grief, for a single unmodified regret. Most women could mourn their husbands in that way — mourn a loss and a subtraction from their lives, love left on their hands while the object of it passed away. But she — what had death brought to her? She held up her loss and looked at it, bewildered.

For hours she had been looking forward to this time when she could close

her door upon herself and balance her humiliation and her grief. There had not been a moment since the two blows fell — almost simultaneously — that she could give entirely to thought of herself. Men had brought him home ill from the bank and had waited, reluctant and awkward and ill-at-ease, until she had cared for him, and then had told her, clumsily and incompletely, something of the uncovered crime. While she yet stared unsteadily at their revelation, trying to relate herself to this impossible thing, the doctor brought his verdict. His blow seemed to her to fall on a numbed surface, as if she could not quite feel it as she should. Yesterday she had been anxious because Stephen said he had a slight headache, and had been urgent with care and remedies; to-day she looked upon his utter need in a sort of paralysis of effort.

Memory told her little now of those hours of watching. She hoped that she had not been lacking in signs of tenderness; she believed that she had not, so ingrown a habit were they. He yielded to her attentions with his old gentleness, saying only, 'I must get better,' and again and again, ever more urgently, 'I must get better,' each time he roused himself. In the first grayness of a cloudy twilight he looked at her suddenly with more than physical anguish in his eyes and said, 'I must get better — *Katherine* — I must get better'; and then sank lower in the pillows, and so on into the long unconsciousness from which he never awakened.

During those hours while there were needs to be answered or invented, — she would have no nurse brought into that strange time, — she felt always as if, even in this fearful commingling of griefs, she were having a moment of reprieve — a postponement kindly to her. Just beyond this — however it

might end — lay the completion of the facts she must have, and the analysis of her feelings when she should take these apart, and look at them bare, and know their relation to the new terms of her life. The facts she now had, — she had sent for the men this morning, — the amount of defalcation, the period, the conditions. She could easily see how it might all be paid back: there was the car, the hateful insurance, land, perhaps the house. No one need suffer in the least except herself — and she wished to suffer in this way. How many of her pleasures must have come from that money — she never knowing!

She had consciously dedicated this night to her own feelings. When she went up to her room, she went as one keeping an appointment with herself. When morning came to her still-open eyes, she was not disappointed to find that she had not slept. She had not planned to sleep.

But where she had hoped to bring order out of turmoil of feeling, she reached only worse perplexity. There were long, exquisitely poignant memories of years bursting with happiness, of constant generous giving and equally generous taking, of the sweetness of daily meeting a need for her, gently but eagerly urged — and after such memories the abrupt question, what was this man after all? And then he suddenly turned a stranger to her, a man who stole, who deceived, who failed. Her new conception of him was unrecognizable. The gay bravado of life which had made him so lovable and so cheering — what unscrupulousness lay beneath it? The richness of interest and sympathy which made living with him so joyous — what selfishness did it cover? The pleasures she had shared so lightly and confidently were taken from the needs of others.

But that brought her back again to the happiness of that sharing. No

man understood companionship better. The gay hours they had had — the sweet hours — the high hours! He had said this, or done that, or looked thus. She lost hold of analysis in utter grief.

And then she came around the circle once more to the burning realization of disgrace, of humiliation. Even this week, while he died, talk of his sin must have gone from lip to lip all through the town. And to-morrow men would speak of his foolishness, and women of his dreadfulness, and some would be anxiously fearing that they were to suffer through him.

She flung herself from the bed and went to the window, as if freer air might give her some clearness. On the slope opposite, beyond the little park that lay between, a light was burning, as one burned on the floor below her. She knew that that was where Gregory Jordan lay dead, while the whole town mourned his going. He had been in the last thought of many for nights past and in their first morning question. Men grieved for the passing of his generosity, his eagerness for public good, his energetic righteousness, his great friendliness. And while they mourned for him, their thoughts, she knew, would turn to Stephen Chase.

She thought of Mrs. Jordan, older than herself by more than twenty years, and of the dignity and fine graciousness that life had wrought in her. What richness of satisfaction her grief must hold! She had not been robbed of her present and her past at one stroke. For her, pride in what had been would color all the grief of the present.

Through the next day and the next, amidst her own decisions and arrangements, Katherine's mind carried on constantly a bitter comparison with the corresponding scenes in the great Jordan house. She could imagine the comings and goings there, the scale which all feeling would take on: a sort

of heartiness and thankfulness which would run through all regret; the efforts of friends and neighbors and lovers of good to make a last showing of long-felt esteem. No one could guess how many men were indebted to Gregory Jordan for help, for sympathy, for a hand upward toward righteousness or a check on feet slipping downward. They would all be uniting to form such an atmosphere about that home as would make life, and death too, a sort of human triumph.

But in her house, where another man lay dead, what reserve, what embarrassment! She smiled bitterly at the predicament of friends and acquaintances, who knew not how fully to speak or what to pass over. She could take no words simply, but in spite of herself found some perfunctory or unguine, and others clumsy in their masking of a real sympathy. Relatives and early friends brought by the occasion wore an air of silently asking, 'How did this come about?' The whole relation of things about her was so strained, so full of angles and repulsions, that she found no stable point in it for her feelings to rest on.

On Thursday afternoon, while she sat in her shadowed room waiting for her own hour, her mind constantly went in intolerable envy down to the crowded church, — not even his spacious home was adequate or fitting for Gregory Jordan's funeral, — to follow in imagination the scenes there. It would be a great gathering, men coming together in friendship or praise or mere awe of death. Great words would be spoken, high praise from public men, messages from laborers for righteousness and good. Better than all would be the quiet satisfied approval of those words from the onlookers of his life. Mr. Upton would speak of that life, — 'The real flowers on a man's tomb are his own good deeds,' — he was fond of

saying words like that. Exaltation and pride would be the note of the service.

And the next hour — what cruel juxtaposition! She could foresee sensitively the generalizations, the incomplete statements. And all those hearing would fill out the reservation and supply for themselves the unsaid thing. Many would come, embarrassed but conscientious. They would hasten from the church, with the high sense of life they had reached there; and as they came they would say to each other, 'What a difference here!' She had abated not one touch of the publicity proper, or of obvious respect short of display. But she knew that the man lying there, of whom they were taking leave, would have changed suddenly, for most of those present, from the gay and gentle friend, the successful man they had known — to a criminal. It would be with half-averted faces that they would lay him away.

II

It was all over, and she was alone in the thickening twilight, when someone came to her, moving quiet and unannounced through the empty rooms. Katherine rose and waited, but the other woman did not speak until she had come close and laid hesitant hands upon hers.

'It is Mrs. Jordan,' she said. 'Forgive an older woman for coming. And forgive my selfishness in wanting you to comfort me with a grief greater than my own is.'

'How can that be,' said Katherine, 'with your loss? — so great? And *what* is my grief?' she cried vehemently, impetuously, to her own surprise breaking suddenly the silence of the whole alien week. 'I don't know.'

'What is it made up of?' asked Mrs. Jordan after a pause.

'I don't know. Oh, Mrs. Jordan! —

I have n't talked at all — shall I seem brutal if I talk it out? You have lived so wisely, you must understand different kinds of suffering.'

'I know more than one kind,' she said.

Katherine looked at the gray hair showing through the dimness, and at a kind of magnificence of expression and bearing which she had always recognized in Mrs. Jordan, and she seemed to stand before triumphant experience. This woman could never have been humiliated by events as she was now.

'But what kind do I have? It is not merely that I have lost my husband, but I've lost all the life that went before. I never had it at all. I thought I had, but where is it now? There is no happiness in remembering any past days, because the whole thing breaks down and falls away. I don't know what I am mourning.'

'Can you doubt it?'

'I doubt everything. I used to have a notion of making a sort of collection of memories, to put away for old age or sickness or something, storing up my life. After something fine I would say, "I'll put that away" — that was one of the little joking sayings we had; and some day, when we needed them, we were to take them all out and look at them. This is the need, but what happiness will there ever be in them now? They simply were n't there when I thought they were. What have I at all now?' she ended with a cry.

The other woman wearily made a little movement, a change to alertness or energy, as if she found that the interview made more call upon her than she had expected. 'You have all you ever had,' she said, 'except that it is ended. You will add no more to that part of your store.'

'But it never was. All that was built on love — I could n't tell you how per-

fect it seemed. But when you take respect and pride from love —' She stopped in shame. She had not been so definite even with herself before. — 'Oh, Mrs. Jordan! Don't think it is the outside of this that is so hard for me. I can stand the talk and the pity and the disgrace. And I can pay the money back and do without things and be glad to do it. But the part that is taken from me, myself — how can I stand it?'

The older woman gave a little sigh, as if she unexpectedly found before her a thing to which she must set her reluctant hand.

'We all want to choose our tragedies just as we choose our joys,' she said, with a dreariness of her own in the saying. 'We want a big clean admirable tragedy where we can have feelings to match. We don't choose shame or limitation in it. What if your husband had lived after you knew what he had done? How would you have felt toward him?'

Katherine stopped the little nervous movements of her slender hands, as if arrested in her thinking, and said slowly, 'I never thought of that. It all seemed to be an inevitable set of things that had to go together. If he had lived — and I had known,' — she considered earnestly, — 'I should have been shocked — and disappointed, but not angry; and I should have tried to keep him from knowing how much I felt. And at last —'

'In the end you would have forgiven him.'

'Yes,' she said simply, after a pause. 'He would have made me.'

'And he would have lived himself back into his place with you — and with the world.'

Katherine was silent, withholding acquiescence.

'This was only a temporary thing,' Mrs. Jordan went on. 'Men who use money like this rarely mean to defraud.'

It is dishonesty, but not the deliberately selfish kind, that really intends to deprive someone else. It is done many times without final injury to anyone. He meant this to be such a time.'

His wife recalled his anguished 'Katherine — I must get better.' For the first time she began to see, pitifully, the troubled way he had come — and gone.

'But you wanted him to be perfect, as you thought him.'

'Oh, Mrs. Jordan,' cried the younger woman again, lapsing back in her feeling, 'if you knew how I have envied you all day! Yours is such a clear open sorrow — not *muddled* like mine!'

Mrs. Jordan looked at her with pity and human tolerance in her expression. 'Would you change places with me now — my years and all?'

'Yes! See what you have had! Even these last older years side by side! And what you have heard about him in these last few days! If I were you I should be so proud that sorrow would n't count.'

'Would you?' cried Mrs. Jordan, with a sudden breaking into intensity. 'Can't you imagine being willing to exchange pride for grief? Can't you imagine longing for an absorption of sorrow that would swallow every satisfaction? You've envied me in your humiliation — do you know that I have envied you, even this week?'

Katherine Chase roused herself, in an amazement that for the first time took her mind from herself. In the growing darkness of the room she strained her eyes to watch the passionate gesture and bearing of the gray-haired woman. She had a strange feeling as if an actress long-matured were suddenly taking a youthful emotional part.

'I believe it is thirty years since I had a feeling that shook me and tore me and absorbed me as yours now does you. The strongest feeling I've had

in all that time was discontent. I wish I could have a drowning sorrow. *My* sadness is that I can't mourn enough.'

'I don't understand,' said Katherine, bewildered, 'after such a life.'

'Such a life, yes. I was a good wife and Gregory was a good husband — and a good man, in and out. Everything said to-day was true, if it said enough. But in all personal feelings we lived with our pulses low — he did, and I came to do so after a while, reluctantly, always on a level. Our moments of higher feeling all belonged to general things, principles and discoveries and movements and thought. He had warm enough enthusiasm for those. And he had wonderful talent for friendship. He had such clear and kind and lasting relations with men. But he did n't seem to need much more than that, I found. I was his best friend; but when it was analyzed, that was all. I don't think he knew the difference. The selfish element in love, the demand and appropriation, he did n't understand. He was perfect in everything except a selfish want of me. I don't think it was my fault,' she added presently; 'I don't think he would have needed anyone more. Did your husband always ask for you the minute he came in?'

'Yes,' said Katherine quickly, 'he used to call, a perfect hullabaloo, if he came in ten times a day. I could n't break him of it.'

'I thought so. Gregory always went to the library and waited until I came — then he was glad to see me. We were always settled down in our ways, after the very first. I used to watch your husband and you. He had an air always of making another engagement with you before he let go of that one — like a boy. I suppose,' she said wistfully, 'there was n't the least little corner of his life that you had n't been into, invited into.'

'Except one,' said Katherine bitterly.

'One — that was for you too.'

'I was n't asking for money. He was quicker to plan spending than I.'

'Yes, but to give you the scale of life that he wanted to. In this, I suppose something did n't turn out right and he could n't bear to have your life, even temporarily, less rich than it had been. I have n't lived much but I have watched a great deal. I understand how he wanted to give and give. And he expected to pay this back — they always do.'

'We don't want men to sin, and I'm a good woman; but, after all these years, I covet the impulse that made him willing to do it. Don't you see what I've envied you — your richness of feeling all through? You know you never, to the last, wore down a sort of expectancy with your husband. He made you feel that old experiences could always be fresh and new. I could see it — anybody could who was looking. Even driving down for him in the afternoon was an event. It would have been amusing if it had n't been so enviable. You could have for everyday fare what I wanted once in a while.'

'I saw myself getting to be an old woman, and I wanted to feel once, *hard*, before the quiet of age. I wanted one hill-top in the level. I don't think you understand. When I knew that death had come, I thought that this was to be my great experience — it ought to be. But you see how I mourn. I am deeply sad and lonely. But I have lost the power to feel more — and I wanted to feel once to the very utmost, even in suffering. It was my last chance —'

She stopped abruptly.

'But,' said Katherine gently, returning in part to her wonted thoughtfulness for others, 'you said you came for comfort. If I could —'

'Yes — it was absurd and gigantically selfish. Oh, I did wish to tell you not to grieve too much over the bank affair — I wanted to say that. But I thought the sight of your pain might make me a little contented that I was not suffering so much. Forgive such brutal egotism,' she said, rising and taking on something of her usual quiet fineness of manner. 'And forget my unreserve. It is once in a lifetime.'

'Oh!' cried Katherine, with an eager movement of detaining hands. 'Let me say — oh, you have shaken things into relation for me — I can't tell you.'

'Have I?' asked Mrs. Jordan, pausing.

'I was so stunned and selfish and I had only one narrow sight of things. I can see all around again after this. You've given me back so much that I thought I was never to have again! I see what it is now. — You've given me grief, but all that goes with it, too.'

'I am glad,' said Mrs. Jordan wearily. But she laid on the younger woman's shoulders the gentle comforting hands of older years.

Then Katherine took her silently through the hall and let her go as quietly as she had come.

But she herself hastened back to the library as one eagerly keeping an appointment. She turned on soft accustomed lights in the long-used room. She felt as if a presence had been restored, a presence for days rebuffed and set aside, now restored to its right — a right of which grief was the greater part.

CHEMISTRY BEHIND THE FRONT

BY HENRY P. TALBOT

I

WHEN war clouds gather, and the thoughts of the nation turn to questions of preparedness for the impending struggle, consideration is instinctively first given to those problems which relate to the enlistment and training of the military and naval forces, and their adequate equipment with arms and ammunition. Momentarily, the problem of feeding the guns seems more imminent than that of feeding the men. But these days have long since passed, in the present war, and the various restrictions under which we live to-day, notably as to foodstuffs and fuel, have furnished abundant evidence that there are other and equally serious tasks to be met, in order that civilian life may continue a course as nearly normal as is consistent with the unusual demands upon our resources. With a rapidly diminishing supply of laborers, and an equally rapidly mounting cost of all commodities, the situation presents many complexities; and there can be no doubt that, as the war continues, the limitations imposed must become more exacting and burdensome. Most of the remedial measures are included in the general term 'conservation,' and in this field the chemist and chemical engineer must play an increasingly significant part.

The problems which confront us are almost without number, and of widely varied types. Of them all there are none more vital to the nation than those which have to do with our avail-

able supplies of certain soluble nitrogen compounds, and of potash salts for agricultural needs. The problem of a supply of these soluble nitrogen compounds is often referred to as the 'nitrogen question.' It has an unfamiliar sound, but it underlies all that pertains to the feeding of guns or men, whether at home or at the front, or in the homes of our allies. In its simplest form, it is a question where we can obtain, in sufficient quantities, nitric acid and ammonia. Why these are so urgently needed will best be understood by reviewing the uses to which these substances are put in military operations and in civil life.

Nitric acid is involved in the manufacture of nearly all materials used as explosives, whether as propellants in guns, as bursting charges in shells, or as dynamite, or other like substances, used in mining operations. The nitric acid is allowed to react upon such materials as cotton (cellulose), glycerine, or toluene, in the presence of strong sulphuric acid, the products of such reaction being, respectively, gun-cotton (nitrocellulose), nitroglycerine, and trinitrotoluene (T.N.T.). Without nitric acid, then, there could be no explosives, and the nation would be at the mercy of its enemies; a paralysis of both defense and offense would inevitably follow.

But there has been no scarcity of nitric acid evident in the past; why is it to be feared now? The danger lies in the remoteness of the supply of raw material from which the nitric acid is

manufactured. This material is known as saltpetre (sodium nitrate), and the only available natural deposit in quantity is located in Chile. The nitrate is very soluble in water, and can exist only where there is little or no rainfall. The nitrate is mined and shipped to the United States, where it is treated with concentrated sulphuric acid, and the more volatile nitric acid is distilled off and condensed.

Commercially, the process is simple, and no difficulty exists so long as the nitrate is supplied regularly and adequately. But, in the first place, there is no evidence that the natural processes by which the Chilean nitrate beds were originally formed are now going on; and, although some other deposits of nitrate have been found, they are of uncertain extent and inaccessible. As early as 1898, Sir William Crookes, in an address before the British Association for the Advancement of Science, sounded an alarm as to the possibility of the exhaustion of the visible supply of nitrates in a period of from fifty to one hundred years. This, of itself, and with respect only to the peace-time demand for explosives for the world, was quite sufficient to call for careful scientific thought, which, as will be seen, it has duly received.

But there is a much more immediate danger, which is completely exemplified by Germany's condition since 1914. The restriction of the free movement of ships would mean for us, as it has meant for her, a sudden and complete elimination of the Chilean deposits as a source of the all-important nitric acid. Our own situation has not as yet become similarly acute from this cause, but it still remains true that, even under more favorable conditions as to transportation facilities than now exist, it is doubtful whether it would be possible to import the Chile saltpetre in sufficient quantities to meet the unprec-

edented demand for explosives for ourselves and our allies, and for our domestic needs. To this must now be added the possibility of enemy U-boat bases on the Pacific coast, of hostile intrigues with the Chilean authorities, and of strikes, or fuel shortages, or the destruction of plants which would restrict the output of the mines. Reserve stocks of saltpetre were naturally accumulated at the approach of war, but these were pitifully small in comparison with the visible demand. Obviously the situation was unsatisfactory, for we must be self-supporting as to nitric acid. This, then, was one vital phase of the nitrogen question as it existed in 1917.

II

Why is ammonia so important? First, because nitric acid can be made from it; second, because with nitric acid it forms ammonium nitrate, which, when mixed with trinitrotoluene, constitutes the most available explosive charge for use in shells; and, third, because, in combination with sulphuric acid, as ammonium sulphate, it is one of the most important ingredients of fertilizers. The second of these grounds has recently acquired great importance. The unprecedented expenditure of shells in the present war had created a demand for trinitrotoluene which bade fair to outrun the entire available supply of toluene. It is also relatively expensive. While ammonium nitrate is not, by itself, ordinarily regarded as an explosive, when mixed with trinitrotoluene it serves well, and a competent military authority has asserted that, with respect to military operations, the war will be won largely through the use of the cheaper and more available ammonium nitrate. So much for the military uses of ammonia.

The necessity for increased crop-production is sufficiently emphasized by

the daily press. It can be accomplished by increase of acreage, or by more intensive agriculture; preferably by both together. How does the ammonia supply help in this emergency?

Soils are formed by the disintegration of the rocks as the result of weathering, that is, the action of the moisture and carbon dioxide (often called carbonic acid) in the atmosphere. This action is slow, but it has been going on for geologic ages, and on an enormous scale. The soils retain most of the constituents of the rocks from which they originate, but some are removed by solution in water.

Plant-life demands for its support moisture, compounds of carbon, and, in smaller measure, soluble compounds of nitrogen, potassium, and phosphorus. The necessary moisture is supplied chiefly by rainfall, and the rain and snow bring with them small amounts of soluble nitrogen compounds. The carbon compounds are obtained partly from the soil and partly from the air. The remaining items in the plant dietary come from the soil, and, in virgin soils, are to be found in adequate amounts, if due account is taken of variations in the demands of plants of different types. If, however, crops of a particular sort are repeatedly grown in, and later removed from, a soil, there is no opportunity for a replenishing of the ground, such as would occur if the plant lived out its life, and decayed at the place of its growth. The soil is accordingly impoverished, and must be enriched before satisfactory crops can again be obtained.

The commercial fertilizers intended to supply these deficiencies contain soluble compounds of nitrogen, phosphorus, and potassium in varying proportions, according to the demands of the crops to be grown and the character of the soil in question. Nearly all contain some soluble nitrogen compounds,

usually ammonium sulphate, as the nitrates formerly used are now so valuable for other purposes that their use in fertilizers is largely restricted to special brands. Some idea of the significance of the nitrogen question in its agricultural bearing may be gained from the statement, made from reasonable premises, that, if fertilizing materials were available in this country at a cost no greater than that prevailing in Germany at the beginning of the war, the value of our crops could be increased by a billion dollars annually. It has also been asserted that at least half of the increased productivity of lands in Germany since the war has been due to the use of fertilizers.

The problems of preservation and transportation of foodstuffs are, of course, no less important than those of adequate production. In these, again, ammonia plays a large part, for it is through the use of liquefied or highly compressed ammonia that the low temperatures are produced which are required for the production of artificial ice, and for refrigeration plants used on land and sea for the storage and transportation of foods. On account of the necessity for the conservation of ammonia, the Food Administration has taken steps to minimize the number of cold-storage plants. It is also said that many avoidable losses of ammonia which have formerly occurred in the operation of these plants have been obviated.

Such are the uses of ammonia and its compounds which especially concern us. What is the available supply, and why is it now limited?

Ammonia is obtained as a by-product chiefly from the manufacture of illuminating gas and coke. These are made from soft coals, which contain small amounts of nitrogen compounds; and when such coals are heated out of contact with the air, these nitrogen com-

pounds are decomposed and ammonia is formed, which passes off with the gas. Ammonia could not, of course, be tolerated in illuminating gas, as it does not burn readily and would soon make its presence disagreeably noticeable by its pungent odor. Its removal from the gas is, however, easily accomplished because of its ready solubility in water. It is necessary only to pass the gas up through a tower in which a spray of water is falling, to take out all the ammonia. The water solution thus formed becomes the principal source of the ammonia supply. Incidentally it may be noted that garbage, animal scrap, or slaughter-house waste, when they are similarly heated out of contact with air, also yield ammonia, and the aggregate amount obtained from garbage cremation plants is considerable, although small compared with that obtained from coal.

To understand the past and present limitations in the production of ammonia from coals, it is necessary to realize that it has been a by-product in connection with the gas and coke industries, and therefore the amount produced has been determined by the demand for the main products, more especially coke. Coke is required in very large amounts in the iron and steel industries, but, unfortunately, much of this coke has been made in a form of retort, or oven, from which the volatile gases were allowed to escape into the air, where they took fire and were utterly lost. This economic waste, which has been going on for many years, has been enormous, as it has included, besides the ammonia and illuminating gas, the coal-tar, of which more will be said later. Since the beginning of the war these wasteful ovens have been rapidly replaced by the so-called 'by-product ovens,' which provide for the recovery of the volatile products. This has resulted already in a greatly in-

creased ammonia output, and, in normal times, this would go far toward satisfying the natural requirements; but even this fails to meet the extraordinary demand, especially for ammonium nitrate in shells, as mentioned above.

It would at first appear that a solution of this problem might readily be found by increasing the amount of coal subjected to the coking process. But this would obviously further complicate the fuel situation, and would, moreover, result in the accumulation of large unused stocks of coke, with the consequent storage burden and the tying up of much capital. While, therefore, the national resources with respect to ammonia are not subject to the same sort of risk as those which attach to the Chilean nitrate beds, a supplementary source which will not draw on the coal-supply is highly desirable.

III

Having thus outlined the seriousness of the problem of the nitrogen-supply, let us see how the chemists have sought to remedy the situation.

We live in an ocean of atmosphere some six or seven miles deep, composed essentially of nitrogen and oxygen. The nitrogen alone exerts a pressure of about seven tons upon a single square yard of the earth's surface: enough to correspond to about fifty tons of living matter if the nitrogen could be harnessed for service. We breathe in this nitrogen and exhale it unchanged, because, in gaseous form, it is inactive. If, however, some way could be found to change this nitrogen from the inert gaseous form, which the chemist calls the molecular form, into atoms of nitrogen, and then to cause these atoms to combine with atoms of other elements, it would at once become available for many purposes.

The specific task to which the chemist and physicist addressed themselves was that of finding some way in which this great reservoir of inert nitrogen gas about us could be tapped to obtain these active nitrogen atoms which, combined with oxygen and hydrogen atoms, make up nitric acid, or, combined with hydrogen alone, constitute ammonia. The various procedures which have been worked out to accomplish this end are collectively known as 'fixation processes,' and the expression 'fixation of atmospheric nitrogen' has found its way frequently into everyday print. The details of these processes do not lend themselves to description in non-technical terms, but they may be understood in outline.

The atmosphere, as already stated, consists essentially of oxygen and nitrogen, and more than a century ago Cavendish found that, if electric sparks were passed through a confined volume of air, some of the oxygen and nitrogen would enter into combination, forming a compound known as nitric oxide. But so little of the gases would combine that the procedure had only a scientific interest. A renewed study of this phenomenon, under the incentive of Sir William Crookes's warning, developed the fact that, if the sparks were spread out into a species of electric flame by means of electro-magnets, the story was a different one, and processes have been worked out on this principle which are commercially important. From the oxide of nitrogen thus produced and water, it is possible by a series of operations to obtain the coveted nitric acid. Here, then, has actually been found a means of securing nitric acid, which is not dependent upon the imports of saltpetre and does draw its nitrogen from the atmosphere. The commercial process is known as the Birkeland-Eyde process. Unfortunately, however, the amount of elec-

trical energy required to operate this process is very large as compared with the output, and it can be a commercial success, as compared with other fixation processes, only if this electrical energy can be generated by water-power, of which there is not much to spare in our own country. It has found its greatest development in Norway. There appear, however, to be possibilities that the process may be modified in such a way as to increase its efficiency, and this is just now the subject of careful scientific investigation. While it has not yet served to meet our own emergencies, it still has much potential value.

But, fortunately, researches along other lines have been more immediately productive of commercially feasible fixation methods. In these the immediate product is ammonia, which, as has been stated, is a compound made up of nitrogen and hydrogen. In all the processes by which the nitrogen of the atmosphere is fixed in the form of ammonia, it is necessary to separate the oxygen from the nitrogen; for oxygen is as active as nitrogen is inert, and would seriously interfere with the fixation processes. It is interesting to note how this may be accomplished by first liquefying the air—a procedure which is not considered difficult or expensive. The liquid air is really a mixture of liquid nitrogen and liquid oxygen, which may be compared with a mixture of alcohol and water, containing a considerable proportion of alcohol. If such a mixture is heated, the alcohol, being more volatile, boils away first, the water remaining behind. If the alcohol which thus boils away were collected, it would be found to be nearly pure. In an exactly similar way nitrogen boils away first from the liquid air, if this very cold liquid is allowed to warm up a bit; and the nitrogen can be collected in a condition of such purity that the

removal of the remaining small amounts of oxygen is easily accomplished.

Having succeeded in the isolation of the nitrogen from the atmosphere, the chemist has found that it can be made to combine with hydrogen, the other constituent of ammonia, by bringing these two gases together at a high temperature, and under high pressures. This commercial process is known as the Haber process. It was 'made in Germany,' but has been improved, by the General Chemical Company, and offered to the government. This offer has been accepted, and a plant is being built at Sheffield, Alabama, which will have an output of twenty thousand tons of ammonium nitrate per year, and will soon be in operation.

The Haber process is the only one in which ammonia is directly produced. There are three others in which an intermediate nitrogen compound is first produced, which, when treated with water, yields ammonia. Of these processes the most important at present is that known as the cyanamide process. It utilizes cheap raw materials, — lime, coke, and nitrogen, — and gives promise of yielding ammonia at the lowest cost of all fixation processes. The government is erecting a cyanamide plant to cost some \$20,000,000, with a capacity of 110,000 tons of ammonium nitrate per year, at Muscle Shoals, Alabama, and has authorized the erection of another of equal capacity in Ohio. It is stated that this is the process most generally used in Germany for the production of ammonia, which also means nitric acid; for, as has been briefly stated, ammonia may be converted into nitric acid.

Some twenty-five years ago, Wilhelm Ostwald, then well known as one of the pioneers in physical chemistry, discovered that under certain conditions the same oxide of nitrogen which has been mentioned in connection with the

Birkeland-Eyde process could be obtained from a heated mixture of air and ammonia. It has already been pointed out that nitric acid can be made from this oxide of nitrogen. Thus an ammonia supply becomes also a source of nitric acid, and it would be difficult to overestimate the influence of this discovery of Ostwald's upon international affairs to-day. Without it, or its equivalent, Germany, cut off from the Chilean nitrate beds, would have to rely upon the costly and relatively inefficient methods of the Birkeland-Eyde type for her entire supply of nitric acid for the manufacture of ammunition. With it, she has been able to supply herself with explosives, and to utilize the ammonium products as fertilizers for her lands, to her great advantage. It is now our task to turn this discovery to equally good account, for through its aid we, too, must render ourselves independent of the Chilean nitrate beds, by being able to produce within our own borders nitric acid sufficient for even emergency needs.

The seriousness of the 'nitrogen problem' was recognized early in the war, — even before our participation in it, — and the National Research Council appointed a committee to make a careful study of the situation. This committee made an extensive report, which has already been of great value. The work of the committee is now perpetuated through advisory relations with the Nitrate Division of the Ordnance Department. Extended investigations have been undertaken by the Bureau of Mines, and various phases of the problems involved are now being studied by experts in the laboratories of the universities and technical schools of the country. This is as it should be, for the problem of nitrogen fixation will not lose its significance for us as a nation with the ending of the war.

Our newspapers frequently mention

the necessity for a careful husbanding of the stocks of metallic platinum now in the country. As this question closely associates itself with the nitrogen question, it is of interest to examine into the real situation. Platinum is needed for two exceedingly important processes, namely, the manufacture of sulphuric acid, and the conversion of ammonia into nitric acid. It is also required for other processes, but these two will serve as illustrations.

Platinum is not a part of either sulphuric acid or nitric acid, but, curiously, when the materials from which these acids are made are brought together, they react very much faster if platinum is present. Many instances of this sort are known, and the phenomenon is called catalysis and the platinum a catalyst. In a crude way the platinum may be compared to the oil on the works of a clock—it lubricates the chemical change and hurries it on to completion. Now, we need to increase our output of sulphuric acid by a considerable amount, for the manufacture of explosives and fertilizers, which means the erection of new plants; and there are as yet no plants at all equipped to convert ammonia into nitric acid. For all of these, platinum, in its rôle of lubricant, is absolutely necessary. The only considerable supply is in Russia, which is now closed to us. Certain deposits in Colombia are of doubtful extent and availability. While it is true, on the one hand, that the catalyst platinum is not consumed in the manufacturing process which it promotes, yet there are unavoidable mechanical losses, which are considerable in the aggregate. There are no known occurrences of platinum within the United States which promise to yield any significant amounts.

Under these conditions, it is evident that the greatest caution must be exercised in conserving all available sup-

plies of this metal. An additional reason is to be found in the fact that, because of its high melting-point and chemical inactivity, platinum is the only available material for many utensils used in chemical and physical investigations and in control laboratories of many industries. The government has already commandeered the available stocks of platinum and placed them under restrictions, and the amount held by the government or under its control may suffice for the immediate emergency; but the outlook for the future is not encouraging, and the situation calls urgently for an increasingly enlightened general interest, and perhaps a spirit of sacrifice. However much we may admire the artistic forms in which this metal is offered by the jewelers, the present and future national need of platinum for essential manufacturing operations which are vital in the present emergency is so great, and its use for research, which is no less vital, so important, that all who have the national interest at heart will, for the present, discourage the continued manufacture of platinum into articles of personal adornment.

IV

As already stated, soluble compounds of potash and phosphorus are the other ingredients of commercial fertilizers besides soluble nitrogen compounds. The phosphorus is in the form of 'superphosphate'—a soluble calcium phosphate, made from phosphate rock by treatment with sulphuric acid. There is no dearth of phosphates. The large deposits in the South and some in the West are abundant. Nevertheless, the situation is not without some complications owing to the difficulty in securing sulphuric acid. The demand for this acid in the explosive industry has enormously increased, and, at the same

time, the supply of the mineral pyrites, from which sulphuric acid is made, has decreased on account of limited ocean tonnage for its importation. There is as yet, however, no serious shortage of superphosphate.

But the situation with respect to potassium salts is entirely different. The 'potash question' ranks closely in importance with the 'nitrogen question.' They are similar, in that both exist because of our dependence upon natural mineral deposits outside of our own control.

For many years the potassium salts used in the fertilizer industry, and for the production of potassium compounds in general, have been imported from Germany. There occur at Stassfurt and Leopoldshall salt deposits some thousands of feet in total depth, the upper layers of which contain potassium compounds. These German deposits are exceedingly valuable, not only because of their high content of potash salts, but also because these salts can be readily separated from the admixed material in a state of purity, which makes possible their marketing at a low cost, and at a material profit to the producers.

Germany has been keenly alive to the importance of these deposits. They are, or were, under the control of a syndicate known as the Kali Syndicate, and this, in turn, is well under government control. In 1912 the situation as between the German interests and the American buyers was the subject of many discussions and, finally, of diplomatic exchanges between the two governments. New contracts were finally arranged, which presumably were not to the disadvantage of the German interests.

With the outbreak of the war in 1914, and the restriction of German shipping, the potash situation in the United States rapidly became acute.

There are important deposits of potash salts in Alsace-Lorraine, — also under German control, — and others are reported in Galicia and in Spain, but neither of the two last-named, even if accessible, has any considerable output. The accumulated stocks in this country were not large, the crops must not fail for lack of fertilizer. What could be done?

The potash requirement for successful growth varies widely among plants. It is notably large for garden-crops, and is particularly high in the case of tobacco. Moreover, the soil seems to supply the plants with available potash for a longer time in some localities than in others. Very little potash is required, for example, in the Western States, whereas much is necessary in the East; a fact which must be kept in mind in considering the available means of securing a potash-supply for this country.

For some time the Bureau of Mines of the Department of the Interior and the Bureau of Chemistry of the Department of Agriculture had been prospecting for promising sources of potash, and examining processes for its recovery from rocks or brines; but in spite of this, and of the existence of some hundreds of patents covering such processes, the war emergency found us without commercially workable procedures at hand. Miners, chemists, and chemical engineers combined forces to relieve the situation. It may be stated at once that the ultimate production of potash-salts in sufficient quantities from materials to be found in the United States is essentially a commercial question; that is, a question of cost of production as compared with what the product will command. It can be done, if it will pay to do it. Just now emergency conditions prevail, and costs must be met; but the conditions after the war are so problematical that capi-

tal has been somewhat slow to embark in these enterprises.

Unfortunately there are no known salt-deposits in the United States comparable with those at Stassfurt. Of the brines found in our salt lakes, those of Searles Lake in California and certain lakes in Western Nebraska have been utilized, and about 80,000 tons of potash-salts were obtained from these sources in 1917. But some of this material contained admixed borax, which is said to have proved injurious to plant-life.

A second source of potash has been found in the dust which collects in the stacks leading from the kilns in which Portland cement is made, and also in the flues leading from blast-furnaces where cast iron is produced. These sources give much promise of large yields as soon as the necessary installations can be made.

Still another — and quite different — source of potash-salts is the Giant Kelp, a sea-plant on the Pacific coast. This plant takes potassium chloride from sea-water, and, after drying or burning the plant, the salt is easily leached out. The partially dried plant can also be used directly as a fertilizer. But unfortunately this source of potash is far removed from the markets of the East, where, as already stated, it is chiefly consumed. The latter conditions apply also in the case of the deposits in Utah and Nevada of a mineral called alunite, which is something like an alum in character, and easily yields a soluble potash-salt. This deposit is, however, said to have considerable commercial promise.

The sugar industry also comes to the rescue of the potash situation. Molasses is the mother-liquor from which all crystallizable sugars have been removed, as far as possible. It still contains some of the other ingredients of the juices from which the sugars have

been separated, and particularly in beet-sugar molasses there is a considerable proportion of the potash which the beets have taken from the soil during growth. After fermentation for alcohol, the molasses residue can be burned and the potash-salts leached out. Nearly ten per cent of the potash produced in the United States in 1917 was obtained from sugar residues.

The textile industry also aids with its contribution from wool-scourings, which may be treated in such a way as to yield soluble potassium compounds.

Finally, in the stock-taking of our domestic resources, we must not overlook wood-ashes, the household source of potash (from pot-ashes) for the manufacture of the soft soap, which was so generally made and so highly prized by our grandmothers. Applied on a commercial scale, this leaching of wood-ashes yielded some seven hundred tons of potash in the year 1917.

The total potash-production for the last calendar year was about thirteen per cent of the normal consumption of potash during the years immediately preceding the war. Small as this percentage at first appears, it is a real tribute to the skill and activity of the chemical engineers of the country, and it is full of promise for the future. The hindrances due to the inaccessibility of locations of plants and the imperfect development of commercial processes have been peculiarly serious; and to these must, of course, be added the trials common to all industries in shortage of labor and transportation. Potash-production is just acquiring its real impetus, and, at the same time, under the stress of necessity, it has been found that satisfactory crops can be secured with less potash than was formerly deemed essential. It is, therefore, probable that our dependence upon foreign supplies will be permanently less than at the opening of

the war, and may vanish altogether, with a corresponding assurance of permanent returns for invested capital.

v

Of the numerous crises which confronted our industries at the beginning of this war, none received greater emphasis than that of the dye-stuff shortage, which threatened to paralyze many of our textile industries. The undeniable fact that Germany held the leadership in the development of this branch of chemical production, so far as the coal-tar dyes were concerned, was regarded by many as an example of her superiority in all that pertains to technical chemical development, and as an indication of a corresponding general inferiority on our own part which is far from the truth. This view overlooked the fact that the synthetic-color industry is of a highly specialized character. It calls for a large number of highly trained specialists — university-trained men capable of research work. These Germany had in abundance, and their services were to be commanded at salaries which were far below those paid for less skilled workers in the United States. She had also a relatively large supply of raw materials. This, in itself, may be considered to be our fault, for there has been a sad waste of these raw materials in the same process which has resulted in a waste of valuable ammonia, namely, the use of the 'bee-hive oven' for the coking of coals, alluded to above. The coal-tar was burned outside these ovens and was lost, with the ammonia. The substitution of the closed 'by-product oven' for the 'bee-hive' type, will conserve the raw materials for dye-stuffs as well as the ammonia.

The coal-tar from the ovens is refined, and from it is first obtained what are called the 'intermediates,' such as

benzol, toluene, naphthalene, and anthracene. These, in turn, become the starting-point for the production of the various classes of coal-tar colors, which are of such importance to-day. But the processes are extremely complex, and require exact conditions for their successful operation. They do not lend themselves to description, even in outline, within brief limits. But the fact that to-day standard dye-stuffs of first quality are being produced in quantities which not only are sufficient to meet a normal demand, but have supplied the enormous additional requirements for the production of uniforms and other war-materials, is a splendid tribute to the energy and resourcefulness of the chemical profession.

Coal-tar furnishes also the raw materials for many synthetic drugs, which have become standard remedies in the hands of our physicians. Like the dye-stuffs, many require highly skilled and specialized workers for their production, and our supplies of these drugs were drawn to a considerable extent from Germany; but to-day many of them are obtainable, of American manufacture. A notable case in point is that of salvarsan, the specific discovered by Ehrlich for the alleviation and cure of syphilis. The cessation of a supply of this drug was fast causing a critical situation in our hospitals; but this has been largely relieved through the efforts of American chemists. In the large-scale chemical industries, such as sulphuric acid and soda, we have long ago demonstrated our ability to defy comparison with other nations.

The production of alcohol on an industrial scale, quite apart from the manufacture of alcoholic beverages, has recently acquired added importance on account of the use of alcohol in connection with the manufacture of explosives and in the dye-stuff industry. Indeed, low-priced alcohol is an important fac-

tor in the production of moderate-priced dye-stuffs in the United States. Alcohol was formerly produced to such a large extent by fermentation of grains that it acquired the name of grain-alcohol, to distinguish it from other alcohols, as, for example, wood-alcohol, which is made by the heating of hard woods. Other materials than grains have, however, been used — potatoes among the rest.

But a notable and significant recent advance has been made by the development of processes by which waste wood, such as sawdust, can be converted into substances resembling sugar, and these can be fermented by yeasts, with alcohol as one of the main products. The principles of this process were known before the present emergency arose, and the recent chemical developments have been mainly those required for production on a larger scale; but they are, nevertheless, of marked importance.

This potential source of alcohol in large amounts has an important bearing also upon the increase of the available fuel-supply for use in internal-combustion engines, and is in this way closely connected with another serious problem, namely, the gasoline-supply. Although less volatile than gasoline, alcohol can be used in its stead, if necessary. Gasoline is not a chemical entity. It is, rather, a generic term covering mixtures of volatile substances, composed of carbon and hydrogen, and known to the chemist as hydrocarbons. Formerly these were obtained wholly by the refining and distillation of the crude petroleum oils found in the earth's crust. The consumption of gasoline increased from 7,000,000 barrels in 1899 to 41,500,000 barrels in 1915; and it was plain that the natural supply might be exhausted within a measurable period, even if due allowance were made for the discovery of new petroleum fields, and the perfection of meth-

ods for working up the oil-shales, that is, rocks impregnated with petroleum. This was true without taking into account the war demand for use in airplanes and war-craft, a demand the magnitude of which still remains to be determined.

Shortly before the war began, methods had been worked out on a tentative scale, by which the less volatile components of petroleum, such as the kerosenes, or even the crude petroleum itself, could be converted into volatile compounds which, while not identical with those in natural gasoline, serve equally well as fuels. Much of the liquid fuel obtainable on the market is made by mixing these very low-boiling substances with others more like kerosenes. Data are not obtainable to permit accurate judgment as to the extent to which chemistry has been able to provide for the fuel need under the present extraordinary circumstances; but the outlook is far less disturbing than it would have been without these expedients. The greatly increased production of benzol from coal-tar — probably in excess of the demand for dye-stuff manufacture — may also help, as this substance can also be used as a fuel for gas-engines, although, like alcohol, it is less volatile than the gasolines.

Glass for optical instruments, including field-glasses, periscopes, range-finders, and many others required in large quantities by the exigencies of the war, was very largely imported. When the supply was cut off, experiments were at once undertaken by the Carnegie Geophysical Laboratory at Washington, making use of data and experience which had been acquired in years of experimental research in the chemical processes which accompany mineral formation in nature; and the prompt outcome was the production of substitutes for the imported glasses which are

entirely satisfactory, and the manufacture of them on a large scale is now in progress.

Conservation is the order of the day. The warning to abandon our national habits of wastefulness had been heard, although indistinctly by many, before the war sounded it in trumpet tones. It was a call to arms for chemists, for in no respect can chemical science do more for the nation than by devising means to avoid waste, and increase productive efficiency. This includes, of course, just now, the provision of the best available substitutes for those materials which must be diverted to military uses, or sent where they are more vitally necessary than in our own homes and factories. Olive oil, for example, is scarcely obtainable, and lard must be conserved. The purified cottonseed oil which the chemist has provided is an acceptable substitute for the former, while lard may be replaced by corn oil, or by the hydrogenated oils, known by the trade names of 'Crisco,' and 'Kream-Krisp,' in the manufacture of which the chemist utilizes some of the hydrogen which formerly was a waste product from the bleaching industry.

How extensive the loss of utilizable material may be in commercial operations is well illustrated by the amount of sulphur-dioxide gas (from which sulphuric acid is made) which passes into the atmosphere from a single large stack at a smelter at Anaconda, Montana. The gas is produced by the roasting (that is, heating in air) of ores containing compounds of sulphur, as a first step in the smelting operations by which the metals are obtained from these ores. The sulphur-dioxide gas which issues from this single stack in twenty-four hours occupies a volume of 23,243,000 cubic feet and weighs 2,093 tons, or sufficient to produce 3,427 tons of concentrated sulphuric acid daily.

Incidentally, the escape of this gas into the atmosphere destroys vegetation utterly for miles around.

These figures are significant here chiefly as an indication of the magnitude of the problems to be met; for it must not be supposed that this particular problem has lacked attention. Processes have, indeed, been devised for the utilization of these chimney-gases to produce sulphuric acid; but unless this acid is consumed near the point of production, the transportation charges become prohibitive; and the economical utilization of such enormous quantities of acid as could be produced from the gases issuing from this one stack is not a simple matter.

Such are some of the factors of the conservation problems in the large-scale industries; but the domestic problems of less magnitude are not always of less importance, and chemistry must be of assistance alike to the housewife and the captain of industry.

VI

Thus are the chemist and the chemical engineer wrestling with the problems behind the Front. Only a few of these problems, which are of broad national interest, have been outlined or even hinted at. Many of lesser magnitude are equally vital. It is fortunate that the Secretary of War has issued definite orders that trained chemists who are drafted shall be assigned to those forms of military service at home, or with the Expeditionary Forces, for which their training especially fits them, and that there are signs of an increasing tendency to allow deferred classification for chemists in the essential industries of the country.

But even when those fortunate days arrive when there will be no 'Front' and no war-emergency, there will still be an endless vista of home-problems.

There should now be created chemical reserves for those days as well as for the duration of the war. To this end, it is essential that the young men and women who are now attracted to chemistry as a profession in greatly increasing numbers, should be encouraged, or even commanded, to persist in their training until and unless they are definitely called into national service. The urgency of this is not now sufficiently grasped by these young men and women, or by their advisers. It cannot be too strongly emphasized, if a critical shortage is to be avoided in the future.

And besides man-power, there must be improved methods, which must be

dictated by the thoroughness born of the spirit of research. As a nation we have failed to understand this: we have had 'limitless' resources, and we have wasted them because of inefficient methods and superficial thinking. Academic research must be more generously endowed and industrial research developed. The industries must contribute to the educational institutions and research laboratories, not eventually as a philanthropy, but in their own interests; and the institutions must see to it that their trusteeship is discharged with credit and efficiency, and that traditions do not stand in the way of progress.

THE GREENHORN IN AMERICA

BY MARIA MORAVSKY

I

'OH, I cannot live here, I am always late! Everybody runs ahead! The crowd on the street is so restless! Why are they hurrying so?'

This is the first complaint which hospitable America hears from the Russian immigrant. We are a slow, quiet nation. One of our national stories illustrates this.

'Ivan, Ivan,' says the mistress to her servant, 'give a handful of hay to the horses, and take a rest.'

After two hours she calls again, —

'Ivan, Ivan, shut the door of the stall, and take a rest.'

Three hours later, —

'Ivan, look at the church clock, and tell me what time it is, and take a rest.'

The Russian people have a contemplative soul and are rather lazy. We are nearer to primitive life, when man worked as much as was absolutely necessary to cover his important needs, when he ate, slept, hunted, picked flowers, and had nothing more to do. The sweet remembrance of that plain life lives in the half-oriental soul of the Russian people, and its traditions are potent.

When a few Europeanized Russian manufacturers tried to transplant Taylor's system into their country, there resulted innumerable strikes, and the poor bosses, who were too advanced for our labor-environment, were carried out of the factories on wheelbarrows.

Such a shame!

The circumstances under which the

workingmen of Russia can work are usually as follows: —

They come to the shop or factory half an hour late; and sometimes after a family holiday the delay is greater. At other times, after they have been thoroughly scolded by the boss, the delay is shorter, but as a rule they are late.

Before going to work they drink their tea. Do you know how we Russians drink tea? It resembles a religious ceremony; one must not hurry, when he drinks his tea.

After that they would begin to work. Of course, they did not work very quickly. They would take a rest as often as Ivan did in the story. The boss tried to cheer them up at such times. Every day you would hear a nice conversation between administrators and the employed. I must confess that it was not a literary talk, although very flowery; they blamed each other artistically. They would discover so many new and amazing words! Our people are talented, you know.

I must admit that they were always underpaid and had long hours of work. Naturally, they were not interested in 'doing their duty.' The conditions in our factories were beneath criticism: the choking air, the dirt, and the small working-rooms. Nobody, not even the most patient and humble Russian peasant, could stand it without making a protest. And as they were not strong enough to protest openly, they practised the Italian strike, which became the habit, the second nature of the Russian worker.

The same traditions of delay prevailed in our offices, in our schools, everywhere! We did not appreciate the value of time; or, perhaps, we appreciated it too much to waste it on boring everyday work. It depends on one's point of view.

The same advanced bosses who tried in vain to teach Taylor's system to

Russians, attempted to abandon our tradition of delay. In a few offices were established automatic clock-machines, to note the time of the worker's arrival. This was instituted in war-time. I remember the big munition factory where that 'devilish American invention' appeared for the first time.

The workers held a meeting and found the remedy for defeating the enemy machine.

'I will throw sand in its mouth,' said one of the bravest.

So he did. The expensive clock was destroyed by sand and the small stones which were dropped into its mechanism. The tradition 'to come a bit later' was saved once more.

Here in America such a thing would be impossible.

I notice, to my great surprise, that not laborers only, but even 'professionals,' must do their work scrupulously on time, and hurry, hurry, always hurry! How terrible for a genuine Russian greenhorn!

It was a great shock to me when I was called for the first time to an American magazine office, to translate from Russian to English. The editor telephoned to me, —

'Will you kindly undertake that little work? It has to be done pretty soon.'

'All right. Please send it to me by mail.'

'No!' answered the editor indignantly; 'you had better come to the office immediately. We are in a hurry.'

It struck me as a shot. He could not wait even a few days, although it was not for a daily paper! It amazed me.

Mechanically I put on my overcoat and went to the office; but all the way I murmured to myself with a deep disapproval, 'Why on earth are they in such a hurry?'

I bet you cannot understand my feeling. The poor greenhorn must worry alone: the natives would laugh

at her troubles. But I want to describe to you a little scene in the Russian office, so you may see the big gulf between your life and mine. It is difficult for the Russian immigrant to jump across it at once.

The young man comes to the Russian editor. The latter summoned him two days before — by mail, of course, because there is not a telephone in every flat in our cities. The young writer is out of work, but the day before he had a headache and a 'rendezvous,' so he was too busy to come at once.

The editor begins, —

'How do you do, dear Petr Petrovich? How is everything at home? Take a seat, please.'

'Thank you. Mother is preparing a new sort of jam. Do you like the jam made of the rose-petals? Come and taste it some time. Mother makes it splendidly.'

'Thank you very much. Will you take a glass of tea?' (In Russia we drink it in glasses.) 'Ivan, fetch the samovar.'

After the third glass of weak tea (the Russians have to drink it weak — another important remark), and a little talk about politics, the editor says, —

'By the way, I have a little work for you. Would you like to translate that section of the English book? Just for quotation, you know.'

'Sure! How soon do you need it?'

'Oh, we are in no hurry — a week, or two.'

'I have nothing to do now, so I can do it at once.'

'So much the better. You will send it next week, then?'

What do you think of such a life, my dear American friends? I am conscience-stricken to have to confess that my comrade-greenhorns remember it as a lost paradise. Theoretically I always disagree with them. Very often I would talk and write, that our slowness

and laziness ruin Russia. Russian writers always used to write about it. The famous Goncharoff's *Oblomoff* is a novel about our national laziness. Our literature, which is called the 'conscience' of our nation, was always fighting against that 'tradition of rest.'

I myself wrote a book, which should have proved by statistics the number of hours we lose daily, weekly, and monthly. There were dreadfully eloquent strings of figures, and they proved to my countrymen, without doubt, that we were always at the tail of every civilized nation, because of our bad habit of delay; and that now we are many centuries behind the time. (It was written before the present revolution.) There was a lot of good advice in my book, and it would have been very helpful to my countrymen; but, I regret to say, it was never printed, owing to a few mathematical mistakes: in some parts of my work there were too many 00000, in others too few of them. You understand, they are such trifles, these 00000; but my publisher (he had a dry heart) said to me, —

'My dear Miss Moravsky, you would do better to continue writing poems and fiction; statistics are not your element.'

So my rôle of social reformer was stopped at the beginning.

But let me drop those disagreeable personal recollections. I will continue more objectively.

My people would never be capable of such a heroic deed as to be at the office on time. Never! Nobody! Even the Bolsheviki, who are in such a hurry and have tried to solve twenty-seven big social reforms daily. I bet you that neither Mr. Trotzky nor Mr. Lenine are on time at their headquarters in the Kremlin. It would be against all their habits. I know the Bolsheviki; I was a Bolshevik myself, when I was fifteen.

I remember the secret meetings of our revolutionary students, belonging

to different parties, which were held at night in the University of Odessa. Our president was a Bolshevik.

There was no light in the large hall (we were cautious enough and realized that the light might betray us). A few of us carried small dark lanterns, the speakers talked from the marble table on which the medical students used to chop corpses, and I enjoyed it immensely, because everything recalled to me stories of pirates. (I always had an entirely boyish imagination.)

The seventeenth of the youthful speakers had repeated for the seventeenth time that Tsarism should be overthrown at once, when our watchman came and, approaching the president-Bolshevik, said with a slightly trembling voice, —

‘Comrade president, the police have been told about our meeting. A comrade from the telephone station overheard it; the order to arrest us was given five minutes ago.’

There began a little disorder among the conspirators. They stood up, and a few of them moved toward the entrance. But the president-Bolshevik said, —

‘Five minutes ago — hum — we have plenty of time to finish our meeting; our police is slow enough. Please, comrade, continue your speech, but keep closer to facts. We all know perfectly well that Tsarism must be overthrown. But state your practical proposition about that newly organized district.’

The meeting continued. Half an hour later the second watchman entered and said breathlessly, —

‘Comrades, it is high time to flee! The regiment of Cossacks is ordered to seize us.’

We began to move again; but the Bolshevik-president lifted his hands calmly and commanded, —

‘Be still! Say, comrade watchman,

where is that regiment of Cossacks located?’

‘On the Kulikovo Pole.’

‘That is a long distance from here, seven or eight versts, and they have to dress themselves and to lead out their horses.’

‘But the order was given twenty minutes ago!’

‘Be quiet, comrades, we have time yet. Don’t you know our Cossacks?’

And he knew them well. After nearly half an hour of talking, we left the hall; and after we had parted peacefully, some of us met the Cossacks and gendarmes approaching the university building at full speed. They seemed to realize that they were a bit late!

II

We Russians were used to that kind of slow work, even under the pressure of danger. We never accomplished very much in a short time. But the results depend not always on the quickness of work. On the contrary, it is impossible for people who are always in a hurry to do things thoughtfully and carefully. It is impossible for a political party; it is impossible even for a trade company!

For instance: goods manufactured in America with such tremendous speed are made unskillfully, crudely; they are expensive and yet are not durable. I am talking about the clothes, the toilet articles, and generally about the things which I examined in everyday use. They are far inferior to the French and Russian goods. A pair of Russian shoes could be worn two years, and yet they cost less than American shoes. The delicate hats made in Paris last twice as long as American hats. The good silk dresses from Japan last several years; fur coats from Siberia are handed down from grandmothers to grandchildren as good as new. But

here the dainty silken frocks often last no more than five or six months. This is the result of your speedy industries.

If the result of the speed is so bad for the mere goods, how much worse it must be for politics and art! I will not talk about politics — it is war-time, you know. But I think I may safely tell some bitter truths about your current literature, and your theatre.

I made an experiment: I exchanged the ends and the beginnings in some American short stories from the popular magazines — the parts fitted to each other perfectly after that vivisection. Is not that horrible? The stories made to order, made by dozens, like the machine-made shoes!

Of course, America has her great writers, admired by all the world. But their best works were never made in a hurry for the Sunday paper. And many of these writers died in poverty, like Edgar Allan Poe, because they were not suited to your modern speedy civilization.

The American theatre is not a temple, as in Russia, but merely a place of amusement. Can you Americans send your young people to see the modern drama, with the purpose to enrich their souls? No, your theatres, although rich in scenical effects, have not high enough standards. You yourself would laugh if one should call your theatre the school of life. Many of your comedies remind one of ready-made clothes. You have books which teach the beginner how to make a successful drama. But no one book can teach people how to make a good drama. Your writers think too much about quick success and money, and too little about sacred Art.

'Oh, the greenhorn begins to preach!' says the reader. 'Is it not too bold for a newcomer to criticize our hospitable country?'

I know it may look too bold. But I

criticize America with a loving heart. I do want to see her perfect, because she was the land of my dream, long ago before I came here; and it is so hard to be disappointed with one's long-kept dream!

But the half-disappointed greenhorn loves America in spite of all her faults, and this is the reason she publishes her experiences; perhaps they may be of some use for her American friends.

I always suffer when I see how they spoil, with the best intentions, their art and their goods, their love and their digestion; all because they always hurry so much!

They are especially unkind to their poor stomachs.

A friend of mine, a very stolid and serious person, repeated to me when we happened to dine together, —

'Eat slowly. Sir Gladstone ate slowly. Every healthy great man ate slowly. Don't spoil your stomach.' (He was a physician.)

I came almost to hate him. He used to chew his meals as slowly as a whole herd of cows. But now, in America, when I see in the restaurant the crowd of people who devour their lunches with the speed of a first-class automobile, and who ruin daily their tired stomachs, because of their habit of hurrying, I recall my doctor friend with a grateful feeling. And I think it would be very helpful to your nation to have hung in every lunch-shop a cartoon with these words, —

GLADSTONE ATE SLOWLY

It would be even better, although more expensive, to print the portrait of Sir Gladstone in full and to put below, —

HE ATE SLOWLY!

But I leave the details of my genial proposition to the city fathers.

The laws of the stomach are violated

in America no more often than the laws of the heart.

When I came to America I heard about the enormous percentage of divorces here. I was surprised, and for a short time I formed a bad opinion about American husbands and wives. But I realize, now, that it was a wrong opinion of a greenhorn, who did not get the spirit of the new country. Now I know better; surely American husbands, and especially American wives, are regular people, but the trouble with them is that they hurry too much when marrying.

They are used to hurry all their lives, and it is a dangerous habit, when one must arrange a marriage, which is supposed to be a lifelong business. One must be cautious in such a case, and slow. 'Think before marrying' is no less necessary a slogan than 'Think before speaking.'

Even if an American marriage is a happy one, the couple have not time enough to enjoy their happiness (unless they are millionaires). How many nice women confessed to me here that they can see their husbands just five minutes a day.

'He loves me dearly, you know, but he is so busy! Very often we cannot even dine together, he is always in such a hurry!'

Business before pleasure, business before joy, business before love; one must hurry if one wants to succeed. Don't you think it is a bit cruel, that genuine American creed?

I feel that I begin to talk with bitterness, but I have my personal reasons.

When I was quite a green greenhorn, entirely green, fresh from the steamer, I fell in love with an American.

Oh, it was a terrible experience! I know now how it seems when some one dear to you counts his future appointments, and draws his watch from his pocket every moment when you are

happily together. Six days a week he belongs to his work, and on Sunday only to you. But Sunday is always such a dull day in America: everybody makes love to his sweetheart on that day, so one feels to be in the general parades of lovers. Every nice eating-place is overcrowded, and every cosy bank in the park is inhabited by two or three couples. Even up the Hudson River, even at the Bear Mountains. No, I will never love a businesslike American — never again, thank you.

'Work must be done quickly.' Oh, how I hate that heartless sentence! Especially on a sunny spring day, when the only duty of every human being should be, 'Sing and love.'

How many clerks, shut in dusty offices, would agree with me! How many young girls from shops and factories would shake hands with me on a glorious day of May and say, —

'Oh, you have spoken the very truth: we must not hurry to work now. You are a clever girl, although only a greenhorn.'

When the greenhorn in America complains to me of his hard time, when he bemoans loudly about his 'lost paradise,' his slow work in Russia, I agree with him at times; in spite of my great respect for the business ability of Americans.

In Russia we have often nothing to eat, and the rent is unpaid for a long time. (By the way, we pay rent every month, every three months, or once a year — never for a week, as here. This little fact proves once more that our life is much slower.) We are often out of work, but we have always plenty of time to dream, to love, and to live. The real Russian does not think that work means life: he considers it only a necessary evil. In the depth of his soul he always dreams of a five-minute work-day.

Sometimes he can work passionately,

however. He would throw all his life into his task. He can write a book night and day, and forget sleep, and food. He can work on his field from twilight to sunset, if it is necessary for saving the harvest. He would organize the revolutionary movement, and stand it many years; and be put in jail, and be sent to Siberia, and run away, and start all anew. He would emigrate to a new country, and overcome thousands of obstacles; but he is incapable of one thing, steady and speedy work.

The steady hours of common, unromantic and hurried work, are killing for him. Only in the country, in the forest, and in the field, can he stand it. But you must remember that the country work is not so monotonous as that of the office or factory; the great variety of Nature cannot tire people like always-the-same surroundings of four walls. The spring work and the autumn work is hard, but it is — different. And in the long winter evenings the contemplative soul of the Russian peasant has its long-desired time of dreams. Then he composes songs, poems, stories — probably all the beautiful folk-songs were created during the long lazy season of winter.

The Russian peasant can carve amazingly artistic figures of wood; he can paint and make fantastic designs. The hand-work of our peasants is appreciated in all Europe! But — that is not a steady, common work, with a foreman behind your back to hurry you up. It is a free creating.

Our artists were always poor pupils in school. Many of the great writers were expelled for laziness; and still they could work passionately. Our vagabonds, exiled to the province near the Black Sea, built many successful towns, as Odessa, our first-class port. The immigrants and criminals of Siberia, 'lazy people,' who could not undertake any steady work in cultured cities, created the new, sane, healthy and wealthy life over there. Our Siberian towns are our pride; their originators were able to work sufficiently, but not as steady machines.

Perhaps Russians, with their blind protest against any kind of steady work, are nearer to the ideal life of humanity. I should think so. I believe that all the work of humanity should be not a hurried job, undertaken for money, but a free, joyous and thoughtfully slow Creation.

THE SWAMP

BY BEATRICE RAVENEL

Love called me like a beacon on a hill,
With all the flickering odors of the dark,
And the sharp spurt of fireflies, spark on spark,
And beckoning glimmer of the window-sill;
Low, like his arms, the skyward branches came,
Outlined in down of flame.

I dug my face in leaves. The hovering tree
Laid his swift hands on me,
His careless, thousand-fingered, merciful touch.
The wind that wearied him from side to side
Washed through me like a tide,
And led me past the taloned shadows' clutch
Where the slow swamp lies ambushed to the South.
My feet took hold on their accustomed trace.
And lo, at last I guessed Love's secret face
And the forbidden kisses of his mouth.

Like a cold knife lay on my throat the dew,
Leaves on my lids, and on my slackening heart
The silence, beating like another heart.
Less and less near the need of living grew.
The weary night dragged like a tale of years
Her tense, unresting planets overhead;
The keen grass murmured of the happy dead
That never know its rustling in their ears.
Through the desirous grass my will might seep,
Delicious, irresponsible as tears.
Love, the great lover, my submission bore
Surely to some good ending, safe and deep;
Dead Love, that giveth his beloved sleep —
He that hath nothing better, nothing more.

Almost I slipped my hand in his to go;
When lo, a little dawn-wind like a child
Came singing, and the feathery rushes piled
Their plumes together singing. To and fro
The gray veils of the cloistered moss bowed low
In endless adoration. Lines of white
On Gothic brambles, truculent and wild,
And roots like cunning carvings of delight
Breathed out, because the very dawn had smiled,
Seeing the miracle of the swamp in spring;
The sacred, seven-veiled lustre of the light
Walked on the water, kindling ring on ring.

The water broke in irised arc and shoal —
Green snakes with touches exquisite and long;
More rhythmic than the fresh-of-morning song,
The mocking-bird jets spattering from the brake.
Like some squat Eastern god, macabre, droll,
The alligator shot a silvery wake.
Small outcast creatures quavered into sight
Through elf-lock tangles of the lily-stem,
And pelted me with childish gifts of seeds
Until I noticed them,
The wonderful, the holy little weeds.
Gnats woke the air to fluting spray of gold.
The buzzard floated with an angel's flight
On motionless wide wings,
Effortless, far above our windy strife. —
For God, being God, who said, 'Let there be Light,'
Cannot at all withhold
Some beauty from abominable things,
Some good from life, yea, even from my life.

Death called me like a beacon on a hill,
But smokily, as wood-fires dim and drowse
In sunshine when the early wind is still —
I lit the patient hearth-fire in the house.

DEMOCRACY IN THE NAVY

BY WILLIAM O. STEVENS

ONE Easter Sunday, more than thirty years ago, I landed on the island of Perim, at the southern end of the Red Sea. The visit of a few hours impressed my boyish imagination with two things. One was the unspeakable dreariness of the spot — a mass of black rock baking under a tropical sun, with not a green thing save about a square yard of turf, imported from the mainland, which the handful of British soldiers at the post tried to keep alive. The other impression was the sacredness of military caste, due to a story told in my hearing about a subaltern who had recently been in command.

The poor fellow had grown so desperately lonely in that forsaken spot, that he summoned his sergeant, and, after pledging the man to secrecy, asked him to dinner. Some time after, while in liquor, the sergeant boasted of his distinction. The matter was investigated, the subaltern was proved guilty of the horrible crime, and dismissed from the service. When I heard the story, I could not understand what there was so awful about the young officer's conduct, but was ashamed to betray the fact by asking questions. In later years, on coming in contact with the military, I was given to understand that, while democracy may be all very well in politics, it has no place in the army or navy.

It is not surprising, therefore, that the leaders of democracy in our history have always looked coldly upon professional armies and navies. At the beginning of the nineteenth century the

cry was that they were 'instruments of tyranny' and 'dangerous to liberty.' These sentiments sound absurd now; but it is only fair to remember that Napoleon was a contemporary warning and example. At any rate, it was due to this feeling against armaments that we were so badly unprepared for the War of 1812. After that war the charge that the navy was an 'instrument of tyranny' ceased to be popular; and every war since then has aroused enthusiasm for both our military organizations; but during the long interims of peace there has always been an undercurrent of suspicion or resentment. At bottom the sentiment seems to have been, that our army and navy are organized on traditions that are not only foreign to America, but also hostile to democracy. In our own times that sentiment has apparently been directed chiefly against the navy.

To be perfectly candid, the traditions on which our navy was founded were both foreign and undemocratic. These traditions do not hark back to the Revolution. The truth is that our Revolutionary navy was not conspicuous for discipline or efficiency. For example, the precious rascals who composed the crew of the *Ranger* demanded, in Bolshevik style, that every order involving the destination of the ship be put to vote of the crew; and Paul Jones maintained discipline only by sheer force of will and the iron rod.

After the Revolution what was left of the navy became extinct. The navy of to-day dates from 1798, when a

fleet was created to deal with the French privateers in the Caribbean. In that campaign our ships coöperated with the British, and it naturally came about that we borrowed outright the regulations of the British navy, and with them the British traditions of rank and discipline. In fact, we did not even have a distinctive uniform for our officers until the close of the War of 1812.

Many of the Revolutionary captains were merchant-skippers, who, as Paul Jones complained, were scarcely able to spell out the oath at a court-martial. Jones, who had once been a midshipman in the British navy, insisted, in a letter to the Marine Committee, that 'none other but a gentleman is qualified to support the character of a commissioned officer in the Navy.' It would be interesting to know his idea of a gentleman. He himself was the son of a gardener, but he secretly believed that he was the illegitimate son of the Earl of Selkirk, and his raid on the earl's estate was for the purpose of kidnapping the old gentleman and forcing him to acknowledge the paternity. Although there is not a shred of evidence to support the idea, it doubtless gave Jones great satisfaction to believe that half of him was, not only gentleman, but noble.

In 1798 only the ablest of the Revolutionary officers were chosen for our new frigates, and the midshipmen appointed that year represented the 'first families' of the Atlantic states. At the same time, the men of the crews came from the back alleys of the seaport towns. Thus at the outset there was a social chasm between commissioned and enlisted grades, which was perpetuated by the traditions which we borrowed from the British navy.

In recent years changes have taken place which have tended to bring the banks of the chasm so close together

that it can easily be jumped. In the first place, the midshipmen have long since ceased to represent the 'first families.' The officers of the present American navy hail from every grade of life, from millionaire to bootblack. In the second place, the immense improvement in the treatment accorded to the enlisted men has resulted in a corresponding improvement in the character of the bluejacket. The sailor and the officer may come from the same rank of society. What is more important, there are a hundred vacancies at the Naval Academy open to enlisted men who can pass the entrance examinations; and since we went to war many a warrant officer, who had risen from the enlisted grade, has won temporary promotion to the commissioned ranks.

All this is anathema to the navies which still cling to the old aristocratic traditions. Our navy is 'too democratic,' our officers are 'not gentlemen,' and our enlisted men are so ruined by consideration that we do not know what discipline is. A German Naval Reserve officer obligingly informed me some years ago that we had no discipline in the American navy; and his opinion was eloquently confirmed by another German officer, about the same time, in an interview with an American lieutenant at Port-au-Prince. The American had gone ashore, leaving his boat to wait for his return. While he was gone, a German officer arrived at the same landing with his boat. Apparently the American sailors did not make way for his boat fast enough, for the Teuton was so enraged that he gave up his errand ashore and waited till the American officer returned. Then the storm burst. The statement of grievances ended thus, —

'You do not in your navy know vot discipline iss! Look, I vill show vot it in our navy iss!'

Thereupon the German rose in his boat and proceeded to smite the two sailors who faced him on the thwart, beating upon their cheeks with the full sweep of his arm till he was out of breath.

'Ha, you see?' he panted, as he settled himself in the stern sheets again; 'dot iss Cherman discipline!'

Strange to say, however, while our navy has been damned by the foreigner for its democracy, it has been criticized by our own people for being undemocratic. The phrase 'instrument of tyranny' long since yielded to 'naval snobbery.' This feeling is due chiefly to the fact that, despite the democratization of the commission, the tradition of social superiority in the commissioned grade has held fast. One of the ablest officers in our navy since the Civil War brought a storm of unpopularity upon himself and the service by a published statement opposing the idea of opening commissions to the enlisted grades, on the ground that 'the naval officer should be a gentleman.' Unfortunately, as the country knew, this particular officer was the son of a day-laborer.

This insistence on a caste distinction between the commissioned and enlisted grades has no foundation in the naval Regulations; it is merely tradition, and a tradition borrowed, as we have seen, from the British over a century ago; but it has had the force of law. Not long ago, a naval officer took a prominent official to task because he had addressed an assembly of recruits as 'young gentlemen' instead of 'my lads.' To the ordinary American citizen it is not clear why it should be a misdemeanor to call these recruits 'gentlemen,' in view of the fact that there would have been no criticism of the term if the same men had been in civilian clothes. The word does not mean much, but the discrimination seems to

make the sailor's uniform a humiliating kind of livery. If the enlisted man is not a gentleman, it follows that he is not fit to associate with gentlemen; and it is worth while to call attention to the fact that all attempts made by the authorities to punish restaurant and theatre managers for discriminating against the enlisted man's uniform are futile so long as the distinction is drawn by the service itself.

The invariable retort of the naval man has been that this distinction was necessary to discipline. And discipline in this connection seems to mean the prevention of 'undue familiarity' between the one who issues commands and the one who obeys. In the world of education, the word discipline has been associated with subjects that have been handed down by tradition but have no justification in usefulness; and it is quite possible that much the same thing is true of the caste line in the navy. For instance, there is little 'undue familiarity' between the ensign and the rear admiral, but there is no artificial barrier, as between Brahmin and pariah. They are both 'gentlemen,' but the ensign is expected to obey his superior with the same promptness that is expected of the seaman.

On the other hand, it is not fair to attribute the existence of the caste idea entirely to the native or acquired snobbery of the naval officers and their wives, as certain newspapers and Congressmen have intimated from time to time for many years. It is true that some youthful members of the service — especially brides, daughters, and midshipmen — have a careless way of referring to all who are not of the elect as 'only civilians,' or 'only reserve officers,' or 'only enlisted men.' But that air of superiority is not to be taken seriously, for it does not represent the navy as a whole. As a matter of fact, during normal peace-times the line of

social cleavage between officers and men has fallen close to such a line as would naturally and unconsciously be drawn in social intercourse for men in business or the professions. Although a midshipman may be a pretty rough specimen when he enters the Academy, his four years' course applies a sand-papering process which gives him an immense social advantage over his brother who enters the navy by enlistment. It is also worth noting that in fleet athletics the officers play on the same baseball and football teams with the men, and that the captains of these teams are usually enlisted men. This is one of the horribly democratic blemishes of our navy which have worried officers of European navies.

The most probable reason for the survival of the caste tradition is that it fits in with the naval idea of 'rates.' The chief criticism of our new reserve officers is that 'they don't understand rates'; in fact, it is hard for any outsider to regard these things as seriously as the naval man does. Rates are the unofficial but inflexible privileges that accompany each grade in the service. When a midshipman enters the Academy, he learns to his sorrow that he 'rates' nothing but the title 'Mister.' For example, he does not rate walking in Lover's Lane, or using certain convenient stairs in the dormitory, or taking any of the short cuts through the Yard. But as he progresses from class to class he adds to his rates till, as First Classman (Senior), he rates every privilege that the midshipmen can devise without colliding with the Regulations.

The system of unofficial rates prevails also in the fleet. To the naval man, with his passion for orderliness, nothing seems more fitting than a place for every man and every man in his place. One side of the ship is as good as another, but commissioned grades come aboard on the starboard side and

enlisted grades on the port side. The 'Old Man' takes his exercise on the starboard side of the quarterdeck; the other officers take theirs on the port. A man's place is one part of his rates. The other part comprises the privileges that accompany the place. The ordinary seaman sleeps in a hammock and has no handle to his name. The petty officer has a stateroom but still no handle to his name. The warrant officer, by virtue of his braided coat, attains the dignity of 'Mister,' but he and his wife are not on the officers' calling list; and so it goes. Naturally, the social distinction between commissioned and non-commissioned grades came to be regarded as one of the many rates, to be accepted, like the rest, without question.

The shock of this war, however, has upset the tidiness of the military systems at home and abroad. When, in 1914, Great Britain had to expand her professional army to unheard-of dimensions, it is said that even the fashionable boys' schools, like Eton, Harrow, and Rugby, were combed for material for officers, in order that the commissions should still go to 'gentlemen.' As the slaughter of officers went on, stern necessity forced promotion from the ranks. Correspondents reported that at first the 'gentlemen' officers averted their eyes and haughtily strode out of the cafés whenever a 'ranker' presumed to enter. At the present stage of the war, however, it is not likely that much of that spirit survives; certainly the Australians and the Canadians did their bit to kill it.

The change is reflected also in India. Before the war neither a native nor a Eurasian could rise above the non-commissioned grade, because neither — except the native princelings — was considered a gentleman in Anglo-Indian society. To-day both natives and Eurasians are serving as commissioned officers in the British army. Since the

British navy has neither expanded nor suffered like the army, it has probably changed little in this respect. But after the disappointments and failures of this war, the English public has come to suspect that, though the old-school officer in either service did well enough in campaigns against the Burmese or the Basutos, when it comes to fighting Huns, gentility in the commanding officer is not so important as certain other qualities.

In the case of our own army the professional caste traditions have been pretty well swamped by the draft. Our army is a civilian army, and, on the whole, more democratic than any other, save possibly the French. As it happened, our navy was large enough to meet the war demands by an expansion of the regular organization. It is true that there are many more reserve officers in the service now than there were professional officers at the outbreak of war; and, as we have seen, many of these reserve officers seem unable to appreciate the sanctity of rates. But the great shock to the caste idea has come through the war enlistments. The popularity of the navy was never better demonstrated than by the flood of volunteers that poured into the naval recruiting stations at the declaration of war. Large numbers of these men came from the colleges and universities, and many were wealthy. It did not occur to these ardent young patriots that they were making themselves social outcasts by putting on the sailor's uniform. On the contrary they were extremely proud of it, and that sentiment was heartily shared by their friends.

The consequence was that the enlisted man's uniform appeared in every hotel, at every club, at every dance. In every navy-yard town sailors drove their high-powered motor-cars through the streets on the way to the country clubs. Some of the older officers shook

their heads; this sort of thing was 'bad for discipline'; but what can a man do when there is nothing in the Regulations to give him a handle?

An officer of my acquaintance found himself obliged one evening to invite a newly enlisted relative of his to dinner at a hotel. The youngster had often dined with him before, and cheerfully accepted. As the hotel was in a navy-yard town, and other officers were present, the officer did not enjoy the meal. He felt that the morrow would bring a summons to appear before the commandant. But, sad as the breach of discipline was, according to the old standards, not a word was said about it. A few months later the papers contained the announcement that the commandant of a certain naval station had invited to dinner at his quarters twelve enlisted men and warrant officers!

In short, this war has removed the stigma on the seaman's uniform because the finest of our youth are now wearing it. If caste distinction be essential to discipline, as we have heard for over a century, the discipline of the American navy has now gone to ruin.

Of course, the conditions of to-day are abnormal. After the war, college men are not going to flock to the navy. But it is safe to predict that the caste idea will never be the same as it was before the war. In the past, the type of enlisted man improved whenever the conditions and the opportunities of the sailor's life improved. In the future, with the large number of vacancies in the Naval Academy reserved to enlisted men, more ambitious youngsters will realize that the recruiting office is the best gateway to Annapolis. And if the Secretary's recent recommendation is put in force, requiring every midshipman to spend a year as a seaman in the fleet before he can get his commission, little will be left of the prejudice against the bluejacket's uniform.

THE LEAGUE OF NATIONS

BY ALBERT THOMAS

I

WHEN the League of Nations was a new phrase, those persons who welcomed it enthusiastically heard themselves dubbed fools by those who were known as skeptics and as wise men.

At that time the skeptics were, as they are always and everywhere, in the majority; for faith is a rare quality, whereas doubt is the most eminently judicious attitude—the attitude in which one runs the least risk of compromising one's self.

'A League of Nations!—Tell me, do you believe in it?' said a French statesman of light and leading to a Dutch journalist, to whom he had granted an interview. To him, the idea was a Utopia—nothing more.

The wise men adopted a less scornful tone; they replied, with sober faces and after mature reflection, 'The League of Nations is an excellent idea. But before we think of putting it in effect we must bring the war to an end and arrange the terms of peace. Then, and only then, can we give our minds to the creation of any kind of league between all nations. But if we should succeed, doubtless it will mean the entire avoidance of war in the future.'

This dictum of wisdom, which savors of hypocrisy no less than of caution, was that pronounced by Chancellor von Hertling in his reply to President Wilson and Mr. Lloyd George. And it may be that this Teutonic interpretation of the idea has brought some valuable additions to the category of

fools, who have finally found themselves in most excellent and illustrious company.

Indeed, fools are sadly calumniated: elder brothers of the poets, eager to live what the latter content themselves with singing, they are the men who march in the van on the road whereon mankind progresses only by defying the unknown and believing in the future. It is the fools, the idealists, who guide the world.

One day there arrived in France a message sent by a man who had labored alone and had reflected profoundly in his White House, on the other side of the ocean: it was the noble message of President Wilson concerning the League of Nations.

From that moment the idea began to make headway. The fools have become so numerous that they are now regarded as sensible folk. Now that the heads of the governments of the United States and Great Britain have pronounced in its favor, and the principle has been accepted from the tribune of the French Chamber, by Premier Ribot, no one would venture to call the League of Nations a Utopia.

To-day no one denies the principle; but the criticisms, or reservations, relate simply to the possibility of giving it effect, to the method of applying this scheme to the difficulties of the present situation. Those who put forward these criticisms and reservations consider themselves realists, because they claim to concentrate all their attention on the practical details of a tangible

and legal organization. In reality they hypnotize themselves by evoking imaginary obstacles; and we can fairly say of them that they have eyes but see not, and ears but do not hear.

The League of Nations is not yet in power; it is not strong enough; it cannot, to-day, enforce its determination to do justice and its higher law. Nevertheless, it already exists. Its origin and the origin of the present war derive from the same sources; and it has not ceased to develop *pari passu* with the development of the war itself.

Let us recall the beginnings of the great conflict which for four years past has drenched with blood all the battlefields of Europe. It began with the attack of the imperialist states, Germany and Austria, upon Serbia, a small nation without adequate means of defense, which was prepared to make all reasonable concessions to preserve the peace. A few weeks later, its scope was broadened because the German army, in utter disregard of treaties, in violation of the law of nations, forced its way into Belgium. And it was because of this violation of Belgian neutrality, because Germany disavowed her own signature, that Great Britain entered the war.

Months, years pass. The war drags on, spreads out. Germany, thinking only of multiplying her means of attack and defense, constantly commits new violations of the law. In contempt of all international agreements, she inaugurates submarine warfare; and then it is that free America, across the Atlantic, rises in her turn in defense of the Right. Thus, by three stages, — because the rights of the free peoples and international law were violated, — the war broke out, and its contagion spread, as a result of the claim of the Central Empires to universal domination established at the expense of all other countries.

On the other hand, why, and in the name of what undying principles, have these Empires, in their aggression, been confronted by an opposition, by a will to fight, ever more powerful and more obstinate to persevere until victory is declared? Of course, the states directly attacked took up arms in defense of their independence; but still, in the course of that defense they have always declared that, if the destiny of arms should turn in their favor, they would use it solely to reestablish outraged Right, never to inflict upon their enemies the evils which the latter had in store for them.

On the day when France, brutally attacked by Germany, issued the decree of mobilization, on that day, when five millions of Frenchmen rushed to the colors, our claim to Alsace-Lorraine was brought to our mind anew — that is to say, the claim of the right of all French peoples to decide their own fate. This right was violated in 1871, when the people of the two conquered provinces heard themselves described as 'cheap cattle,' and were compelled to pass under foreign domination. At that time Germany appealed fraudulently to the theory of nationalities, declaring that the Alsace-Lorrainers ought to be incorporated in the German body politic, even against their will, because they were Germans in race and in language. The theory which France alleged in opposition was that of the French Revolution, so clearly and emphatically defined by Fustel de Coulanges.

That which distinguishes one nation from another is neither race nor language. Men feel in their hearts that they are of one and the same people, that they have a community of ideas, of interests, of inclinations, of memories, and hopes. This is what constitutes the country. This is why men wish to march together, to work together, to fight together, to live and die for

one another. The country is the thing that we love. It may be that Alsace is German in race and language; but in the spirit of nationality, in love of country, she is French. And do you know what made her French? It was not Louis XIV, but our Revolution of 1789. Ever since that time, Alsace has shared our destiny. She has lived our life. All that we thought, she thought. All that we felt, she felt. She has shared our victories and our defeats, our glory and our errors, all our joys and all our sorrows. She has nothing in common with you. In her eyes the *patrie* is France. In her eyes, Germany is a foreign land.

These words may be said, at the present moment, to represent the universal thought which is the logical consequence of the whole development of our French Revolution. Just as the preëminent dignity of the human person was recognized then in our laws and our codes, so to-day, in the immense revolution which this war really is, the preëminent dignity of each nation must be recognized, the rights of all nations must be reaffirmed and consecrated.

II

It is in obedience to this spirit of justice, to reëstablish outraged Right, and to restore to the injured nations their national integrity, that great nations like Great Britain and the United States have intervened in the war although not directly attacked. Neither Great Britain nor the United States dreams of setting up its own hegemony in opposition to the hegemony of Germany. With them, as with all the members of the Entente, the essential object of this conflict, its reason for being, is not to bring about the triumph of one domination, European or other, rather than another, but to make Europe and the world, once for all, safe from such disruptions; it is to confront the Right of Might with the Might of Right.

If this spirit of justice did not inspire all the nations of the Entente, — if the United States, Great Britain, France, and Italy, entertained the same purposes as the guiding minds of the Central Empires, the same profound contempt for the rights of nations, the same trust in brute force, — it is probable that peace might very easily be made; that it might already have been made. According to the theory on which the old treaties were negotiated, it would have been easy to arrange terms of peace at the time of the Russian breakdown: the states of the Entente had but to be guided by the method adopted by Prussia, Russia, and Austria in a celebrated instance, toward the end of the eighteenth century. They would then have proposed to the Central Empires to divide with them, not a modest little Poland, but the domain, the immense booty of Russia in Europe and in Asia, which would have been practically defenseless against so powerful a combination.

But the bare suggestion of such a detestable solution is enough to disclose how absolutely opposed it would be to all that the nations of the Entente have sought and desired in their action throughout this conflict. Such a solution could be imposed only by violent means upon the peoples who would be the victims of that shameful jockeying. And even if we admit that the efforts of all the states joined and combined could triumph over their victims, how long would such a result endure? How could any twentieth-century people, subjected by force to the domination of this or that power, consent to undergo such a fate? The diplomats of an earlier time had the presumption thus to redraw the map of Europe. In 1815, by the Treaty of Vienna, they disposed arbitrarily of states and peoples. But not many years after, in Germany, in Austria, in Italy, revolutions broke out.

The crime of 1815 led very speedily to the convulsions of 1848.

It would be the same to-morrow if the present-day problems should be solved summarily according to the old methods. New disputes would very soon arise — internal disputes, in which the subjugated populations would strive, by insurrections, to make their disregarded rights effective once more; disputes between the nations which had managed the partition and which would all have reasons for fighting among themselves, as do bandits when they come to a division of the spoil.

To arrive at the durable peace which is the common goal of all the nations of the Entente, we must repudiate the method of violence in any degree whatsoever; we must abandon all idea of founding the guaranties of national security upon force. Even if we should succeed in achieving by military and diplomatic pressure the rehabilitation of the invaded countries, the object that we pursue would not be attained. The destruction of the German army, even the dismemberment of Germany, would not suffice to ensure the safety of France. The past teaches us the worthlessness of the strategic precautions of the conqueror when he is in a position to impose his will upon the vanquished.

In the triumphant hours of 1806, when Napoleon I had Prussia under his heel, he thought to reduce the Prussian army to helplessness by limiting it to 40,000 men under arms. The Prussian generals who were forced to submit to these harsh conditions speedily caused the whole civilian population to submit to military training; and in 1813, it was a whole militarized nation that confronted the tyrant at Leipzig.

III

Such is the lesson of history. It teaches us that the Great War, the cru-

sade of the nations of the Entente to ensure the reign of liberty and justice throughout the world, cannot be brought to an end by a peace negotiated after the manner of the treaties of an earlier time.

What confidence could we have in a final treaty analogous to those which our enemies have treated as 'scraps of paper,' rather than allow themselves to be impeded by them in their brutal aggression? The moment their validity was put to the test, the treaties bearing the signature of Germany and purporting to guarantee the independence and neutrality of Belgium became, in the eyes of German statesmen, mere scraps of paper. And that shocking phrase was not, mark you, a hasty exclamation, uttered in a moment of intense excitement by a minister whose imagination led him to partake of the savage enthusiasm of the invading troops; no, it expressed succinctly the German will and the German purpose, in their conception of the relations of the strongest nation with the weakest.

In the past four years innumerable acts have confirmed and emphasized the iniquitous remark of the German Chancellor; and German jurists have undertaken to justify it in their writings. Listen to the words of a German 'intellectual,' Joseph Köhler, Professor of International Law: —

No law is so sacred that it must not yield to necessity; and this act, performed under the pressure of necessity, does not constitute a violation of law. . . . The irresistible force of war and conquest takes possession of countries and peoples; that is one of the fundamental principles of international law. . . . Let us not lend an ear to the voices of those who emphasize the difficulties to which annexation would give rise in the victorious state, on the pretext that it would come in collision with alien elements which might offer resistance. That idea may terrify a weak and timid people, but a youthful and sturdy one is content to

thrust aside obstacles of this nature: the great Siegfried does not allow himself to be frightened by a recalcitrant population.

This is the sort of thing that German jurists are writing after four years of war! According to them, justice no longer preoccupies any but weak and timid nations! The great Siegfried, for his part, proposes to crush beneath his heel the liberty of those peoples who attempt to resist him! That is why, when the hour of peace shall have struck, the signature of the great Siegfried will not be enough for us. What we must have is, as President Wilson has said many a time, an international treaty, in which all questions shall be submitted to a supra-national authority which, on the one hand, will be charged with the duty of defining the rights of the nations, and on the other, will have at its disposal the means to secure the recognition of those rights by force.

Face to face with a foe who has not disarmed, who has renounced none of his schemes of domination, the only guaranty is the union of all nations, the creation of a supreme tribunal clothed with the duty and the power to enforce respect for the conditions upon which peace shall seem possible to us. This necessary solution is within our reach, since the essential mutual understanding is already achieved by the impressive union of the greatest nations of the world, leagued together in defense of liberty.

Before studying the first traces of the existence of the League of Nations in the past, and before discussing its probable future, we have thought it well to show that it does already exist. It was born of the very excess of suffering and tyranny imposed upon the world; it has grown in the bosom of our worst distresses, as the noble prophetic verses of Victor Hugo proclaimed more than a half-century ago:—

Dès à présent dans nos misères
Germe l'hymen des peuples frères;
Volant sur nos sombres rameaux,
Comme un frelon que l'aube éveille,
Le Progrès, ténébreuse abeille,
Fait du bonheur avec nos maux.¹

IV

The experience of Rome in ancient times shows us what the Empire of the Cæsars did for the enfranchisement and peace of the universe, so long as it continued to be a league of nations. The peoples which made up that Empire did not depend upon an Emperor, but upon a political association, a body of senators, magistrates, and citizens; and they realized that they had at the same time a great and a smaller country.

This happy equilibrium was destroyed on the day when the Roman Empire undertook to transform itself into a single entity; when it ceased to be an organization of different nations and cities, and mingled all that it included in one confused whole, without proper differentiation.

In the Middle Ages we have the example of the Church, which exercised rights of sovereignty in each of the states under its jurisdiction. Its rôle in the termination of wars, in the conclusion of treaties, affords an example of numerous supra-national interventions which were effective down to the period when religious authority was checkmated by the coming of modern times and the development of lay elements.

More recently still, it has been impossible to disregard the scope of international conventions: for example, those which were created to abolish slavery and to establish the Universal Postal Union.

¹ Even now, in our desolation, the union of the brother-nations is germinating; flying over our darksome state, like an insect awakened by the dawn, Progress, an obscure honey-bee transforms our misfortunes into good fortune.

Since the meeting of the Anti-Slavery Conference at London, that is to say, from 1841 to 1910, there have been 175 inter-governmental conferences, some of which have met with quasi-regularity; for instance, there have been fifteen geodesic conferences, thirteen sanitary, and eight penological.

Lastly, there have been the conferences at The Hague, where we find a significant alignment of the powers in making important decisions. When, in 1907, the nations had assembled to enter into compulsory arbitration treaties among themselves, the main principle was ratified by thirty-five votes, with only five in opposition — those of Germany, Austria-Hungary, Greece, Roumania, and Turkey. That is to say, only eleven years ago, at the time of signing the arbitration treaties, the Entente stood almost solidly on one side, with the neutrals, while on the other side were the Central Empires and their allies. In these beginnings, made in the face of opposition, we see the first form of that League of Nations which, since the war began, has resolved itself into the present system of inter-Allied relations. In the federation of all the nations who are fighting for the Right, not one is, at this moment, acting with entire independence. They must, one and all, unite and act together, not only in what concerns their armies, but also in respect to the general conduct of all the diplomatic and political affairs of the Alliance.

In face of the unity of control of the enemy, the restrictions upon their individual sovereignty to which the Allied nations assent go constantly deeper and deeper. Every day further progress is made among them toward a closer and closer bond of union, a subordination of all alike to the common, higher interest which guides them and unites them in this conflict.

This bond of union, freely accepted, and this subordination of all to the general interest, have extended from the general conduct of the war to the domain of supplies, of finances — in a word, step by step, to the whole life of the nations

The reciprocal oversight thus exercised does not appear in the light of an annoyance or an encroachment but, on the contrary, as a guaranty and constant assurance of the continuity and fair distribution of the efforts of each one of the nations in the common struggle.

In this closely knit bond of the Entente, the smaller nations are neither sacrificed, nor even subordinated more than the greater ones, to the general interest. But they feel that they stand on an equality as to their rights, no less than as to their duties, in the councils which decide upon the common action and upon the means of putting it in execution. It was these councils which reached an agreement to define our war-aims. They will lay down our terms of peace also, which will include no private terms for any member of the Entente.

We see, then, that it has been found to be necessary, in order to bring the war to a successful issue, to establish between the various nations of the Entente a system of international relations, more strictly defined and more restrictive of their individual sovereignty than would be possible in times of peace. And this is the decisive, peremptory argument which answers by anticipation all the objections as to practical obstacles in the way of the creation of the League of Nations. What remains to be solved is nothing in comparison with what has been solved and with the benefits we may expect to derive therefrom.

If the League of Nations had been in existence in August, 1914, Germany

probably would not have declared war; but even if she had dared to do so in defiance of the conventions signed by her, all the nations which are willing to guarantee justice and the law would have found themselves compelled to enter at once into the conflict. Instead of intervening without concert and one by one, all the nations of the Entente would have come forward together, armed and ready to defend the Right, at the precise moment in August, 1914, when the crime was committed.

Such is the world-organization at which we aim, and which has been proved to be practicable by the experience of four years of war. It is in process of realization; to perfect it, nothing more is needed than perseverance on the part of the governments, and the concurrence of all the free nations.

Then will come true the old dream of all the great minds which in times past have aspired to the enthronement of justice. Listen to Kant, whose thought is distinctly adverse to Germany in the *Essay on Perpetual Peace*:—

No treaty of peace can be considered as such if either party to it secretly reserves some ground for renewing the war. . . .

No independent state (whether large or small makes no difference) can be acquired by another, whether by inheritance, exchange, purchase, or gift. . . .

No state should intervene by force in the polity and government of another state. . . .

No state, at war with another, should be guilty of such hostile acts as, on the return of peace, would make mutual confidence impossible: as, for example, the employment of murderers or poisoners, the violation of a capitulation, or an attempt to spread treason in the state with which it is at war. . . .

The civil constitution of every state should be republican. . . .

The law of nations must be based upon a federation of free states.

All the great revolutionary spirits have declared that the rights of the peoples collectively must be recognized

in society, even as the rights of man have been recognized.

It was Victor Hugo who, as a Deputy in the Assembly of 1848, said: 'The French people have hewn from imperishable granite, and laid, in the centre of the old monarchical continent, the first stone of the vast edifice which will some day be known as the United States of Europe.' And it was Lamennais who, in his *Words of a Believer*, replied thus to the question, 'Young soldier, whither goest thou?'—'I am going to fight for justice, for the holy cause of the nations, for the consecrated rights of the human race.'

This reply our soldiers translated into action, when, in August, 1914, all France rose to defend itself against the German aggression. All our soldiers, all the workingmen, peasants, tradesmen, merchants, and professional men of France, when they were called upon to fight for the freedom and independence of their native land, had another idea as well. When, on receipt of the order of mobilization, they joined their regiments, one and all exclaimed, 'We propose that this shall be the last war!' Since then many of them have fallen on the battlefields of the Marne, the Yser, Verdun, and the Somme. But those who remain preserve the memory and the determination of those dead heroes who saved France, and they are resolved to fulfil, over and above the salvation of their country, the noble humane dream of their vanished brothers.

V

The fulfillment of this dream is the only clearly defined object which the proposed supra-national organization will set before itself at the beginning. Its first duty will be to eliminate, or at all events to reduce as far as possible, the chances of another war. It will suc-

ceed in that object by creating a system of rights between nations like that which the State, among civilized peoples, creates between individuals.

It is a difficult task. To progress from the anarchical condition of the world before the war to a complete organization deserving the name of a League of Nations in the fullest sense of the word — that will unquestionably be a long, long road; but we can clearly make out the first stage, which we can traverse during the war.

A court of arbitration must be set up — that is to say, a method of procedure for settling controversies between nations, analogous to that which has already been resorted to in a certain number of cases. But to avoid the repetition of an experiment which was tried in the last decades of the nineteenth century, and of which the acid test of this war has demonstrated the inadequacy, we must invest the tribunal with the function of drawing up the rules to be applied, and reinforce it with the power to execute them.

In reply to President Wilson's eloquent appeal in favor of compulsory arbitration, we saw last year the Central Empires, and even the Sultan of Turkey himself, give in a solemn adhesion to the principle. There was just one small restriction: the principle of arbitration was accepted by the representatives of our adversaries only with reservation of the 'vital interests' of either of the three Empires concerned. We know to-day, by the example of the treaty of Brest-Litovsk, what those Empires mean by their 'vital interests,' and how far they carry their contempt of the most legitimate interests of other nationalities.

Of course, nations more considerate of the rights of others might refrain from such excesses; but we must recognize none the less that an attitude of distrust with respect to any given sys-

tem of unconditional arbitration is altogether justifiable, even for states honestly well disposed to the principle.

The supra-national organization should therefore take for its immediate task to establish the essential rights likely to be agreed upon by the participating nations. General formulæ are not enough. Upon general formulæ the whole world may declare itself to be in accord — even Chancellor von Hertling and President Wilson; but as soon as we come to precise applications, unconquerable opposition appears.

The supra-national organization will have to study one after another, in connection with the great principles offered for its scrutiny, the formulæ and the rules capable of transforming a general platonic ideal into a workable law, susceptible of practical judicial execution.

This scheme may seem over-ambitious, and so it would be, in fact, if it were proposed to solve all questions at a single stroke; to secure at the first attempt a complete code of relations between the different states. But we consider, on the contrary, that, in this more surely than in any other matter, the questions to be solved must be divided into categories. Sufficient unto the day is the evil thereof. Let us give to this organization, to begin with, the general commission to establish and maintain between its constituents, as well as with regard to all others, the law of nations as defined by parties contracting under it.

This would relieve us from the necessity of bothering our minds immediately about a host of problems, and would also enable us to promulgate the most essential and most urgent rules looking to the conclusion of the present conflict.

But when these rules shall have been once laid down, when the law of nations shall have been formulated, there will still be left for us to face the

most serious difficulty of all — the stumbling-block which has thus far caused the breakdown of all the plans of the pacifists: that is to say, the creation of an executive force at the service of this law, and of penalties to be imposed upon those who may be tempted to violate it.

Such penalties are possible; different categories have been suggested. The first, which have sometimes aroused a smile of incredulity, have nevertheless real merit. They take the form of an appeal to be made to public opinion, to the opinion of the whole world. Our adversaries, who, at the beginning of the war, defied this opinion so far as possible, have finally recognized its importance. They have put forth their utmost efforts, by means of a propaganda no less false than frantic, to reverse, not only in neutral countries, but among the Allies, the moral judgment which they saw to be altogether adverse to them. They have resorted to all possible methods to cast upon us the responsibility for the conflict, or, at least, for its continuance. And this fact demonstrates the unquestionable efficacy of moral penalties.

There are also the economic penalties, the most potent of which are the boycott, reprisals, expulsions, sequestrations, judicial isolation, the economic blockade, and the abolition or restriction of international commerce.

All these methods, which have been utilized during the war, must be retained after the war, against powers which might still claim to dominate the world; which should refuse to recognize the rules and principles established by common action. Our adversaries attach very great importance to this species of coercion. They are tremendously anxious to find out to what extent and for how many years the 'economic weapon' will be used against them after the cessation of hostilities.

It is certain that this economic weapon is to-day, and will remain, a most powerful one in the hands of the Allies. But in order to assure the possibility of its employment as long as may be necessary, we must be prepared to support it at need by military force.

At this point, we have to deal with the problem of creating a military force in the service of the law of nations, whose duty it shall be to compel obedience to the decisions made by the League of Nations; and we find ourselves confronted by two equally vital requirements which seem contradictory. On the one hand, we are convinced that, if this war does not result in lessening for the future the burden of an armed peace, we shall have accepted to no purpose all the sacrifices which it has already cost us. And, on the other hand, unless we are to fall asleep prematurely in the delusions from which our Russian friends have just had such a cruel awakening, we face the necessity of maintaining, in the service of the very peace that we seek to establish, a force strong enough to punish infractions of plighted faith.

But these two requirements are not so incompatible as they seem at first sight. If the limitation of armaments were imposed on every state, we can readily see that the sum of the forces of all the others exerted against an isolated state would be irresistible. It would be essential, of course, that there should be perfect coördination between these forces — a connection so intimate as to assure their immediate, simultaneous, and therefore effective employment. But there would be no need to place all the national armies under a single, absolute supra-national command; it would suffice to maintain, in times of peace, the close relation which already exists between the Allied armies.

Whatever the difficulties in the way of carrying through such a scheme, the

fact remains that we cannot evade the problem. If we do not solve it, we shall fall back sooner or later into the condition of rivalry and competition in armaments with which the world was familiar before the present war.

Doubtless the composition of this international military force will be the most delicate question for the League of Nations to settle. But other essential questions will demand settlement with equal urgency, immediately upon the advent of peace, and even before it is concluded.

Provision will have to be made for the economic life of the nations which have taken part in the conflict, and for distributing among them raw materials and the means of subsistence.

Finally, there will have to be provided a supra-national authority which will be indispensable in the matter of liquidating the finances of the various states and enabling them to return to a normal economic régime after the tremendous upheavals caused by the war in the economic life of the whole world.

Again, it will be necessary to appeal for the intervention of the supra-national authority to settle many peculiarly delicate and complex questions, as, for example, ensuring the neutrality or the freedom of the Dardanelles.

Here, then, are certain very urgent, very clearly defined tasks, which we offer for the action of the League of Nations. It alone can perform them, and reëstablish order after the immense upheaval which will leave in utter disarray the men and the bodies politic of the world before the war. On all sides new problems and duties arise, and it is enough to enumerate them, to show that, beside the skeptics who do not believe in the League of Nations, beside the wise men who postpone them to a later date, if we are idealists, — in other words, fools, — we are very positive idealists.

VI

We have not failed for an instant to base our arguments on facts. Always, in every sort of process that we have discussed, we have sought only to continue what has already been begun during the war and for the purposes of the war, adapting it to the new necessities and to the lasting conditions of a state of peace.

Here is no question of creating, in the air, as it were, and without precedents, institutions still untested, which would justifiably arouse distrust: here is a question of stabilizing the various categories of inter-Allied institutions which are already functioning and growing ever more effective as the war goes on.

Moreover, America has heretofore exhibited a noteworthy example of an international organization in the Pan-American Union, which does not constitute a new state, for it has no supreme tribal or sovereign power; but, thanks to its periodical conferences and to its permanent bureau at Washington, it already forms a sort of administrative, scientific, and economic union, complete in every detail.

There has been a deal of discussion as to whether Germany should be admitted to the League of Nations, or be debarred therefrom. It is for her alone to furnish the reply.

It is quite evident that imperialist and militarist Germany, which assumes to impose her domination upon Europe and to hold the civilization of the twentieth century under the perpetual menace of her big guns, could find no place in a league of nations destined to establish and maintain respect for the Law. But we should commit a serious mistake if we imagined that Germany forms a single mass, inspired solely by the ideal of its General Staff, and sharing all its aspirations. However feeble the reaction in

Germany may be, it exists; numerous strikes offer to the observer unmistakable signs of internal disturbances, and presage, if not a revolution, at least an evolution.

It is this evolution which the world awaits. It is this evolution which President Wilson predicts in the masterly address delivered on July 4 last, at the tomb of Washington:—

‘The blinded rulers of Prussia have roused forces they knew little of—forces which, once roused, can never be crushed to earth again; for they have at their heart an inspiration and a purpose which are deathless and of the very stuff of triumph.’

Lord Grey of Falldon, in a pamphlet recently published, declares that the Allies cannot save the world if Germany herself remembers nothing of the lessons of the war; if she does not realize that militarism is the deadly enemy of mankind.

To the same purpose Lord Curzon said in a recent speech in the House of Lords, ‘It is essential that there shall be a general agreement among the nations; and to obtain a useful result, all the nations on earth must become parties to it.’

From all these solemn and impartial declarations it follows that we must not only conquer Germany, but convert her. And that will be the great, the supreme victory to which President Wilson beckoned us when he defined the principles of the League of Nations.

These same principles were put forward more than a half-century since by the philosopher Jules Barni, at the Peace Congress which he convoked at Lausanne. He made numerous and illustrious converts: Victor Hugo, Edgar Quinet, Élysée Reclus, and the great

English philosopher, John Stuart Mill.

But Barni met also with a refusal to accept his ideas from a man whom no one can suspect of mental timidity, but whom we admire to-day rather for his courageous keenness of vision—the Italian revolutionary Mazzini, who argued that peace could not become the law of human society until that society had passed through a conflict which should establish life and association on the foundation of justice and liberty.

Mazzini concluded with these words: ‘Duty points the way to the object we should seek: that is, the triumph of the moral law, and the suppression of whatever stands in the way of its fulfillment; the reconstitution of Europe; the sovereignty of the free and equal associated nations; aid from all to all for the emancipation of those who are oppressed, for the relief of those who suffer, and for the education, the independence, the armament of all.

‘This object—why not say it?—is a last great holy crusade, a battle of Marathon in the service of Europe for the triumph of the principle of progress over the principle of inertia and reaction.’

These admirable sentences point us to the duty we are carrying out to-day. The hour has struck of the last holy crusade for the liberation and independence of all peoples. The consecrated army is forming, majestic and formidable, in the blood-drenched roads leading to the luminous heights of the future. And to bring succor to those who are engaged in the struggle, to acquit our debt to those who will never return, we must strive to instill into all minds, to infuse into all the nations, the two essential virtues, energy and faith.

WITH THE AMERICAN SUBMARINES

BY HENRY B. BESTON

AN HEROIC JOURNEY

A LONDON day of soft and smoky skies, darkened every now and then by capricious and intrusive little showers, was drawing to a close in a twilight of gold and gray. Our table stood in a bay of plate-glass windows overlooking the Embankment close by Cleopatra's Needle. We watched the little double-decked tram-cars gliding by, the opposing, interthreading streams of pedestrians, and a fleet of coal barges coming up the river, solemn as a cloud.

Behind us lay, splendid and somewhat theatric, the mottled marble, stiff white napery, and bright silver of a fashionable dining-hall. Only a few guests were at hand. At our little table sat the captain of a submarine who was then in London for a few days on richly merited leave, a distinguished young officer of the 'mother ship' accompanying our under-water craft, and myself. It is impossible to be long with submarine folk without realizing that they are a people apart, differing from the rest of the naval personnel even as their vessels differ. A man must have something individual to his character to volunteer for the service, and every officer is a volunteer. An extraordinary power of quick decision, a certain keen, resolute look, a certain carriage; submarine folk are such men as all of us like to have by our side in any great trial or crisis of our life.

Guests began to come by twos and threes — pretty girls in shimmering dresses, young army officers with

wound-stripes and clumsy limps. A faint murmur of conversation rose, faint and continuous as the murmur of a distant stream.

Because I requested him, the captain told me of the crossing of the submarines. It was the epic of an heroic journey.

'After each boat had been examined in detail, we began to fill them with supplies for the voyage. The crew spent days manœuvring cases of condensed milk, cans of butter, meat, and chocolate down the hatchways — food which the boat swallowed up as if she had been a kind of steel stomach. Until we had it all neatly and tightly stowed away, the Z looked like a corner grocery store. Then, early one December morning, we pulled out of the harbor. It was n't very cold, merely raw and damp, and it was misty dark. I remember looking at the winter stars riding high just over the meridian. The port behind us was still and dead, but a handful of navy-folk had come to one of the wharves to see us off. Yes, there was something of a stir — you know, the kind of stir that's made when boats go to sea: shouted orders, the plash of dropped cables, vagrant noises. It did n't take a great time to get under way; we were ready, waiting for the word to go. The flotilla — mother-ship, tugs and all — was out to sea long before the dawn. You would have liked the picture: the immense stretch of the grayish, winter-stricken sea, the little covey of submarines running awash, the gray mother-ship

going ahead, as casually as an excursion steamer, into the featureless dawn.

'The weather was wonderful for two days, a touch of Indian summer on December's ocean; then, on the night of the third day, we ran into a blow, the worst I ever saw in my life. A storm — oh, boy!'

He paused for an instant. One could see memories living in the fine, resolute eyes. The broken noises of the restaurant, which had seemingly died away while he spoke, crept back again to one's ears. A waiter dropped a clanging fork —

'A storm. Never remember anything like it. A perfect terror. Everybody realized that any attempt to keep together would be hopeless. And night was coming on. One by one the submarines disappeared into that fury of wind and driving water, the mother-ship, because she was the largest vessel in the flotilla, being the last we saw. We snatched her last signal out of the teeth of the gale, and then she was gone, swallowed up in the storm. So we were alone.

'We got through the night somehow or other. The next morning the ocean was a dirty brown-gray, and knots and wisps of cloud were tearing by close over the water. Every once in a while a great hollow-bellied wave would come rolling out of the hullabaloo and break thundering over us. On all the boats the lookout on the bridge had to be lashed in place, and every once in a while a couple of tons of water would come tumbling past him. Nobody at the job stayed dry for more than three minutes; a bathing-suit would have been more to the point than oilers.

'Shaken, you ask? No, not very bad: a few assorted bruises and a wrenched thumb; though poor Jonesy on the Z3 had a wave knock him up against the rail and smash in a couple of ribs. But no being sick for him; he kept to his

feet and carried on in spite of the pain, in spite of being in a boat which registered a roll of seventy degrees. I used to watch the old hooker rolling under me. You've never been on a submarine when she's rolling, — talk about rolling — oh, boy! We all say seventy degrees, because that's as far as our instruments register. There were times when I almost thought she was on her way to make a complete revolution. You can imagine what it was like inside. To begin with, the oily air was none too sweet, because every time we opened a hatch we shipped enough water to make the old hooker look like a start at a swimming tank; and then she was lurching so continuously and violently that to move six feet was an expedition. The men were wonderful — wonderful! Each man at his allotted task, and — what's that English word? — carrying on. Our little cook could n't do a thing with the stove, might as well have tried to cook on a miniature earthquake; but he saw that all of us had something to eat — doing his bit, game as could be.'

He paused again. The Embankment was fading away in the dark. A waiter appeared, and drew down the thick, light-proof curtains.

'Yes, the men were wonderful — wonderful. And there was n't very much sickness. Let's see, how far had I got? — Since it was impossible to make any headway, we lay to for forty-eight hours. The deck began to go the second morning, some of the plates being ripped right off. And blow — well, as I told you in the beginning, I never saw anything like it. The disk of the sea was just one great ragged mass of foam being hurled through space by a wind screaming past with the voice and force of a million express trains.

'Perhaps you are wondering why we did n't submerge. We simply could n't use up our electricity. It takes oil and

running on the surface to create the electric power, and we had a long, long journey ahead. Then ice began to form on the superstructure, and we had to get out a crew to chop it off. It was something of a job; there was n't much to hang on to, and the waves were still breaking over us. But we freed her of the danger, and she went on —

'We used to wonder where the other boys were, in the midst of all the racket. One ship was drifting toward the New England coast, her compass smashed to flinders; others had run for Bermuda, others were still at sea.

'Then we had three days of good easterly wind. By jingo, but the good weather was great! Were we glad to have it? — oh, boy! We had just got things shipshape again when we had another blow, but this second one was by no means as bad as the first. And after that we had another spell of decent weather. The crew used to start the phonograph and keep it going all day.

'The weather was so good that I decided to keep right on to the harbor which was to be our base over here. I had enough oil, plenty of water; the only possible danger was a shortage of provisions. So I put us all on a ration, arranging to have the last grand meal on Christmas day. Can you imagine Christmas on a little storm-bumped submarine some hundred miles off the coast? A day or two more and we ran calmly into — shall we say, "deleted" harbor?

'Hungry, dirty; oh, so dirty! We had n't had any sort of bath or wash for about three weeks; we all were green-looking from having been cooped up so long, and our unshaven grease-streaked faces would have upset a dinosaur. The authorities were wonderfully kind, and looked after us and our men in the very best style. I thought we could never stop eating, and a real sleep — oh, boy!'

'Did you fly the flag as you came in?' I asked.

'You bet we did!' answered the captain, his keen, handsome face lighting at the memory. 'You see,' he continued in a practical spirit, 'they would probably have pumped us full of holes if we had n't.'

And that is the way the American submarines crossed the Atlantic to do their share for the Great Cause.

INTO THE DARK

I got to the port of the submarines just as an uncertain and rainy afternoon had finally decided to turn into a wild and disagreeable night. Short, drenching showers of rain fell, one after the other, like the strokes of a lash; a wind came up out of the sea, and one could hear the thunder of surf on the headlands. The mother-ship lay moored in a wild, desolate, and indescribably romantic bay; she floated in a sheltered pool, a very oasis of modernity, a marvelous creature of another world and another time. There was just light enough for me to see that her lines were those of a giant yacht. Then a curtain of rain beat hissing down on the sea, and the ship and the vague darkening landscape disappeared — disappeared as if they had melted away in the shower. Presently the bulk of the vessel appeared again. At once we drew alongside, and from that moment on, I was the guest of the vessel, recipient of a hospitality and courtesy for which I here make grateful acknowledgment to my friends and hosts.

The mother-ship of the submarines was a combination of flagship, supply-station, repair-shop, and hotel. The officers of the submarines had rooms aboard her, which they occupied when off patrol, and the crews off duty slung their hammocks 'tween decks. The boat was pretty well crowded, having

more submarines to look after than she had been built to care for; but thanks to the skill of her officers, everything was going as smoothly as could be. The vessel had, so to speak, a submarine atmosphere. Everybody aboard lived, worked, and would have died for the submarine. They believed in the submarine, believed in it with an enthusiasm which rested on pillars of practical fact.

The chief of staff was the youngest captain in our navy; a man of hard energy and keen insight; one to whom our submarine service owes a very genuine debt. His officers were specialists: the surgeon of the vessel had been for years engaged in studying the hygiene of submarines, and was constantly working to free the atmosphere of the vessels from deleterious gases and to improve the living conditions of the crews. I remember listening one night to a history of the submarine, told by one of the officers of the staff; and for the first time in my life I came to appreciate at its full value the heroism of the men who risked their lives in the first cranky, clumsy, uncertain little vessels, and the imagination and the faith of the men who believed in the type. Ten years ago, a descent in a sub was an adventure to be prefaced by tears and making of wills; to-day submarines are chasing submarines hundreds of miles at sea, are crossing the ocean, and have grown from a tube of steel not much larger than a lifeboat, to underwater cruisers which carry six-inch guns.

Said an officer to me, 'The future of the submarine? Why, sir, the submarine is the only war vessel that's going to have a future!'

On the night of my arrival, once dinner was over, I went on deck and looked down through the rain at the submarines moored alongside. They lay close by, one beside the other, in a pool

of radiance cast by a number of electric lights hanging over each open hatchway. Beyond this pool lay the rain and the dark; within it, their sides awash in the clear green water of the bay, their gray bridges and rust-stained superstructures shining in the rain, lay the strange, bulging, crocodilian shapes of steel. There was something unearthly, something not of this world or time, in the picture; I might have been looking at invaders of the sleeping earth. The wind swept past in great booming salvos; rain fell in sloping, liquid rods through the brilliancy of electric lamps burning with a steadiness that had something in it strange, incomprehensible, and out of place in the motion of the storm.

And then a hand appeared on the topmost rung of the nearer ladder, and a bulky sailor, a very human sailor in very human dungarees, poked his head out of the aperture, surveyed the inhospitable night, and disappeared.

'He's on Branch's boat. They're going out to-night,' said the officer who was guiding me about.

'To-night? How on earth will he ever find his way to the open sea?'

'Knows the bay like a book. However, if the weather gets any worse, I doubt if the captain will let him go. Branch will be wild if they don't let him out. Somebody has just reported wreckage off the coast, so there must be a Hun round.'

'But are n't our subs sometimes mistaken for Germans?'

'Oh, yes,' was the calm answer.

I thought of that ominous phrase I had noted in the British records, — 'failed to report,' — and I remembered the stolid British captain who had said to me, speaking of submarines, 'Sometimes nobody knows just what happened. Out there in the deep water, whatever happens, happens in a hurry.'

My guide and I went below to the

officers' corridor. Now and then, through the quiet, a mandolin or guitar could be heard far off twanging some sentimental island ditty; and beneath these sweeter sounds lay a monotonous mechanical humming.

'What's that sound?' I asked.

'That's the Filipino mess-boys having a little festino in their quarters. The humming? Oh, that's the mother-ship's dynamos charging the batteries of Branch's boat. Saves running on the surface.'

My guide knocked at a door. Within his tidy little room, the captain who was to go out on patrol was packing the personal belongings he needed on the trip.

'Hello!' he cried cheerily when he saw us; 'come on in. I'm only doing a little packing up. What's it like outside?'

'Raining same as ever, but I don't think it's blowing up any harder.'

'Hooray!' cried the young captain with heartfelt sincerity; 'then I'll get out to-night. You know the captain told me that if it got any worse, he'd hold me till to-morrow morning. I told him I'd rather go out to-night. Perfect cinch once you get to the mouth of the bay; all you have to do is submerge and take it easy. What do you think of the news? Smithie thinks he saw a Hun yesterday. Got anything good to read? Somebody's pinched that magazine I was reading. Thirteen, fourteen, fifteen—that ought to be enough handkerchiefs. Hello, there goes the juice!'

The humming of the dynamo was dying away slowly, fading with an effect of lengthening distance. The guitar orchestra, as if to celebrate its deliverance, burst into a triumphant rendering of Sousa's 'Stars and Stripes.'

My guide and I waited till after midnight to watch the going of Branch's Z5. Branch and his second, stuffed into

black oilskins down whose gleaming surface ran beaded drops of rain, stood on the bridge; a number of sailors were busy doing various things along the deck. The electric lights shone in all their calm unearthly brilliance. Then slowly, very slowly, the Z5 began to gather headway, the clear water seemed to flow past her green sides, and she rode out of the pool of light into the darkness waiting close at hand.

'Good-bye! Good luck!' we cried.

A vagrant shower came roaring down into the shining pool.

'Good-bye!' cried voices through the night.

Three minutes later all trace of the Z5 had disappeared in the dark.

FRIEND OR FOE?

Captain Bill of the Z3 was out on patrol. His vessel was running submerged. The air within—they had but recently dived—was new and sweet; and that raw cold which eats into submerged submarines had not begun to take the joy out of life. It was the third day out; the time, five o'clock in the afternoon. The outer world, however, did not penetrate into the submarine. Night or day, on the surface or submerged, only one time, a kind of motionless electric high noon, existed within those concave walls of gleaming cream-white enamel.

Those of the crew not on watch were taking it easy. Like unto their officers, submarine sailors are an unusual lot. They are *real* sailors, or machinist sailors—boys for whose quality the navy has a flattering, picturesque, and quite unprintable adjective. A submarine man, mind you, works harder than perhaps any other man of his grade in the navy, because the vessel in which he lives is nothing but a tremendously intricate machine.

In one of the compartments the

phonograph, the eternal, ubiquitous phonograph of the navy, was bawling its raucous rags and mechano-nasal songs, and in the pauses between records, one could just hear the low hum of the distant dynamos. A little group in blue dungarees held a conversation in a corner; a petty officer, blue cap tilted back on his head, was at work on a letter; the cook, whose genial art was customarily under an interdict while the vessel was running submerged, was reading an ancient paper from his own home town.

Captain Bill sat in a retired nook, if a submarine can possibly be said to have a retired nook, with a chart spread open on his knees. The night before, he had picked up a wireless message saying that a German had been seen at sundown in a certain spot on the edge of his patrol. So Captain Bill had planned to run submerged to the spot in question, and then pop up suddenly in the hope of potting the Hun. Some fifteen minutes before sundown, therefore, the Z3 arrived at the place where the Fritz had been observed.

'I wish I knew just where the bird was,' said an intent voice; 'I'd drop a can right on his neck.'

These sentiments were not those of anybody aboard the Z3. An American destroyer had also come to the spot looking for the German, and the gentle thought recorded above was that of her captain. It was just sundown; a level train of splendor burned on the ruffled waters to the west; a light, cheerful breeze was blowing. The destroyer, ready for anything, was hurrying along at a smart clip.

'This is the place all right, all right,' said the navigator of the destroyer. 'Come to think of it, that chap's been reported from here twice.'

Keen eyes swept the shining uneasy plain.

Meanwhile, some seventy feet be-

low, the Z3 manœuvred, killing time. The phonograph had been hushed, and every man was ready at his post. The prospect of a go with the enemy had brought with it a keen thrill of anticipation. Now, a submarine crew is a well-trained machine. There are no shouted orders. If a submarine captain wants to send his boat under quickly, he simply touches the button of a Klaxon; the horn gives a demoniac yell throughout the ship, and each man does what he ought to do at once. Such a performance is called a 'crash dive.'

'I'd like to see him come up so near that we could ram him,' said the captain, gazing almost directly into the sun. 'Find out what she's making.'

The engineer lieutenant stooped to a voice-tube that almost swallowed up his face, and yelled a question to the engine-room. An answer came, quite unheard by the others.

'Twenty-four, sir,' said the engineer lieutenant.

'Get her up to twenty-six.'

The engineer cried again through the voice-tube. The wake of the vessel roared like a mill-race, the white foam tumbling rosily in the setting sun.

Seventy feet below, Captain Bill was arranging the last little details with the second in command.

'In about five minutes we'll come up and take a look-see [stick up the periscope], and if we see the bird, and we're in a good position to send him a fish [torpedo], we'll let him have one. If there is something there, and we're not in a good position, we'll manœuvre till we get into one, and then let him have it. If there is n't anything to be seen, we'll go under again and take another look-see in half an hour. Reilly has his instructions.' (Reilly was chief of the torpedo-room.)

'Something round here must have got it in the neck recently,' said the destroyer captain, breaking a silence

which had hung over the bridge. 'Did n't you think that wreckage a couple of miles back looked pretty fresh? Wonder if the boy we're after had anything to do with it. Keep an eye on that sun-streak.'

An order was given in the Z3. It was followed instantly by a kind of commotion — sailors opened valves, compressed air ran down pipes, the ratchets of the wheel clattered noisily. On the moon-faced depth-gauge, with its shining brazen rim, the recording arrow fled swiftly, counter clockwise, from seventy to twenty, to fifteen feet. Captain Bill stood crouching at the periscope, and when it broke the surface, a greenish light poured down it and focused in his eyes. He gazed keenly for a few seconds, and then reached for the horizontal wheel which turns the periscope round the horizon. He turned — gazed, jumped back, and pushed the button for a crash dive.

'She was almost on top of me,' he explained afterwards, 'coming like hell! I had to choose between being rammed or depth-bombed.'

There was another swift commotion, another opening and closing of valves, and the arrow on the depth-gauge leaped forward. Captain Bill was sending her down as far as he could, as fast as he dared. Fifty feet, seventy feet — ninety feet. Hoping to throw the destroyer off, the Z3 doubled on her track. A hundred feet.

Crash! Depth-charge number one.

According to Captain Bill, who is good at similes, it was as if a giant, wading along through the sea, had given the boat a vast and violent kick, and then, leaning down, had shaken her as a terrier shakes a rat. The Z3 rocked, lay on her side, and fell through the water. A number of lights went out. Men picked themselves out of corners, one with the blood streaming down his face from a bad gash over his eye.

Many of them told later of 'seeing stars' when the vibration of the depth-charge traveled through the hull and their own bodies; some averred that 'white light' seemed to shoot out of the Z3's walls. Each man stood at his post waiting for the next charge.

Crash! A second depth-charge. To everyone's relief, it was less violent than the first. A few more lights went out. Meanwhile the Z3 continued to sink and was rapidly nearing the danger-point. Having escaped the first two depth-charges, Captain Bill hastened to bring the boat up to a higher level. Then, to make things cheerful, it was discovered that the Z3 showed absolutely no inclination to obey her controls.

'At first,' said Captain Bill, 'I thought that the first depth-bomb must have jammed all the external machinery; then I decided that our measures to rise had not yet overcome the impetus of our forced descent. Meanwhile the old hooker was heading for the bottom of the Irish Sea, though I'd blown out every bit of water in her tanks. Had to — fifty feet more, and she would have crushed in like an egg-shell under the wheel of a touring-car. But she kept on going down. The distance of the third, fourth, and fifth depth-bombs, however, put cheer in our hearts. Then, presently, she began to rise; the old girl came up like an elevator in a New York business block. I knew that the minute I came to the surface those destroyer brutes would try to fill me full of holes, so I had a man with a flag ready to jump on deck the minute we emerged. He was pretty damn spry about it, too. I took another look through the periscope, and saw that the destroyer lay about two miles away, and as I looked she came for me *again*. Meanwhile, my signal-man was hauling himself out of the hatchway as if his legs were in boiling water.'

'We've got her!' cried somebody aboard the destroyer, in a deep American voice full of the exultation of battle. The lean rifles swung, lowered. 'Point one, lower.' They were about to hear 'Fire!' when the Stars and Stripes and sundry other signals burst from the deck of the misused Z3.

'Well, what do you think of that!' said the gunner. 'If it ain't one of our own gang. Say, we must have given it to 'em hard.'

'We'll go over and see who it is,' said the captain of the destroyer. 'The signals are O.K., but it may be a dodge of the Huns. Ask 'em who they are.'

In obedience to the order, a sailor on the destroyer's bridge wigwagged the message.

'Z3,' answered one of the dungaree-clad figures on the submarine's deck.

Captain Bill came up himself, as the destroyer drew alongside, to see his would-be assassin. There was no resentment in his heart. The adventure was only part of the day's work. The destroyer neared; her bow overlooked them. The two captains looked at each other. The dialogue was laconic.

'Hello, Bill,' said the destroyer captain. 'All right?'

'Sure,' answered Captain Bill, to one who had been his friend and classmate.

'Ta-ta, then,' said he of the destroyer; and the lean vessel swept away in the twilight.

Captain Bill decided to stay on the surface for a while. Then he went below to look over things. The cook, standing over some unlovely slop which marked the end of a half a dozen eggs broken by the concussion, was giving his opinion on destroyers. The cook was a child of Brooklyn, and could talk. The opinion was not a nice opinion.

'Give it to 'em, cooko,' said one of the crew, patting the orator affectionately on the shoulder. 'We're with you.'

And Captain Bill laughed to himself.

THE RETURN OF THE CAPTAINS

The breakfast-hour was drawing to its end, and the very last straggler sat alone at the ward-room table. Presently an officer of the mother-ship, passing through, called to the lingering group of submarine officers.

'The X4 is coming up the bay, and the X12 has been reported from signal station.'

The news was received with a little hum of friendly interest. 'Wonder what Ned will have to say for himself this time.' 'Must have struck pretty good weather.' 'Bet you John has been looking for another chance at that Hun of his.'

The talk drifted away into other channels. A little time passed. Then suddenly a door opened, and, one after the other, entered the three officers of the first home-coming submarine. They were clad in various ancient uniforms which might have been worn by an apprentice lad in a garage: old gray flannel shirts, and stout grease-stained shoes; several days had passed since their faces had felt a razor, and all were a little pale from their cruise. But the liveliest of keen eyes burned in each resolute young face, eyes smiling and glad.

A friendly hullabaloo broke forth. Chairs scraped, one fell with a crash.

'Hello, boys!'

'Hi, Ned!'

'For the love of Pete, Joe, shave off those whiskers of yours; they make you look like Trotsky.'

'See any Germans?'

'What's the news?'

'What's doing?'

'Hi, Manuelo,'—this to a Filipino mess-boy who stood looking on with impassive curiosity,—'serve three more breakfasts.'

'Anything go for you?'

'Well, if here isn't our old Bump!'

The crowd gathered round Captain

Ned, who had established contact (this is a military term quite out of place in a work on the navy) with the eagerly sought, horribly elusive German.

'Go on, Ned, give us an earful. What time did you say it was?'

'About 5 A.M.,' answered the captain. He stood leaning against a door, and the fine head, the pallor, the touch of fatigue, all made a very striking and appealing picture. 'Say about eight minutes after five. I'd just come up to take a look-see, and saw him just about two miles away, on the surface, and moving right along. So I went under to get into a good position, came up again, and let him have one. Well, he saw it just as it was almost on him, swung her round, and dived like a ton of lead.'

The audience listened in silent sympathy. One could see the disappointment on the captain's face.

'Where was he?'

'About so-and-so.'

'That's the jinx that got after the convoy sure as you live.'

The speaker had had his own adventures with the Germans. A month or so before, he had shoved up his periscope and spotted a Fritz on the surface in full noonday. The watchful Fritz, however, had been lucky enough to see the enemy almost at once, and had dived. The American followed suit. The eyeless submarine manœuvred about, some eighty feet under, the German evidently 'making his getaway,' the American hoping to be lucky enough to pick up Fritz's trail, and get a shot at him when he rose again to the top. And while the two blind ships manœuvred there in the dark of the abyss, the keel of the fleeing German had actually, by a curious chance, scraped along the top of the American vessel and carried away the wireless aerials!

All were silent for a few seconds, thinking over the affair. It was not difficult to read the thought in every

mind, the thought of *getting at the Germans*. The characteristic *aggressiveness* of the American mind, heritage of a people compelled to subdue a vast, wild continent, is a wonderful military attribute. The idea of our navy is, 'Get after 'em, keep after 'em, stay after 'em, don't give 'em an instant of security or rest.' And none have this fighting spirit deeper in their hearts than our gallant boys of the submarine patrol.

'That's all,' said Captain Ned. 'I'm going to have a wash-up.' He lifted a grease-stained hand to his cheek, rubbed his unshaven beard, and grinned. 'Any letters?'

'Whole bag of stuff. Smithie put it on your desk.'

Captain Ned wandered off. Presently, the door opened again, and three more veterans of the patrol cruised in, also in ancient uniforms. There were more cheers; more friendly cries. It was unanimously decided that the 'Trosky' of the first lot had better take a back seat, since the second in command of the newcomers was 'a perfect ringer for Rasputin.'

'See anything?'

'Nothing much. There's a bit of wreckage just off shore. Saw a British patrol boat early Tuesday morning. I was on the surface, lying between her and the sunrise; she was hidden by a low-lying swirl of fog; she saw us first. When we saw her, I made signals, and over she came. Guess what the old bird wanted — *wanted to know if I'd seen a torpedo he'd fired at me!* An old scout with white whiskers; one of those retired captains, I suppose, who has gone back on the job. He admitted he had received the Admiralty notes about us, but thought we acted suspicious. Did you ever hear of such nerve!'

When the war was young, I served on land with *messieurs les poilus*. I

have seen the contests of aviators, also trench-raids and the fighting for Verdun. Since then I have seen the war at sea. To my mind, if there is one service of this war which more than

any other requires those qualities of endurance, skill, and courage whose blend the fighting men call—Elizabethanly, but oh, so truly—'*guts*,' it is the submarine patrol.

SPIRITUAL REALITIES AND HIGH EXPLOSIVES

BY JOSEPH H. ODELL

I

THE dream came back across the years, vividly and poignantly. No physical circumstance could have been more remote than the gray stone walls of the Theological Seminary within which it disturbed my sleep so long ago. Even the world in which I had lived when it visited me was dead and gone—gone since August, 1914. I was sitting on the unlighted deck of a liner ploughing its desperate way through the submarine zone. No conscious fear was in my heart at the moment, no echoes of serious discussion troubled my mind. There seemed to be nothing but the impenetrable, illimitable, implacable darkness, and the rhythmic swish of the water as the ship rushed through the night. Then memories of the dream returned.

I was in a police court; a sergeant stood by my side in the dock (I could see the three white bands on his sleeve); a bewigged and flinty-faced judge sat on the bench.

'Your Honor, the prisoner is charged with Sabellianism!'

I heard it with ears and brain and soul. I trembled.

The judge looked at me with his

severe and pitiless eyes, but I pleaded, 'Not guilty!'

How long the trial lasted, the nature of the evidence, the appearance of the witnesses, the summing up, I forget. But the sentence rang out so harshly that an eternity of charity could not mute it:—

'You are sentenced to be driven about the city in a cart, and at each street intersection one tooth shall be drawn from your head; at the Queen's Cross your tongue shall be cut out and thrown to the dogs in the pound.'

For some time I could not cast off the spell. Passengers felt their way along the rail and kicked the foot of my chair; a few moonbeams struggled through a rift in the clouds and laid a momentary sheen of silver on the water; someone laughed merrily not far away.

No sooner did the Sabellian horror relax its hold than another waif of that academic period drifted into the zone of consciousness and insisted upon being recognized. 'Come, which of us will you take?' it seemed to say. 'You cannot have both of us. Everyone must choose between us. Nor can you be non-committal.'

'I am Homoousion,' said one.

'And I am Homoiousion,' said the other.

Did not Thomas Carlyle once say that the Christian world had been torn to pieces over a diphthong? But I could not verify the reference and find the interesting context while the ship was driving bravely through the fiend-infested waters of the Bay of Biscay.

Other words came, as if from the depths around me or within me: 'Filioque,' 'Nestorianism,' 'Gnosticism,' 'The Council of Chalcedon.' *Chalcedon* was a very euphonious word; there ought to be a romance behind it; there must be poetry — dreamy, fragrant and passionate poetry — in it; but out on the waste of waters I could do nothing with the word.

Then, sharply, I seemed to feel unreality in it all; perhaps it was not unreality, but it was certainly irrelevancy. Doubtless there are sophists and casuists aplenty who might prove to their own satisfaction that all the ancient orthodoxies and heresies are locked in their latest conflict in this war, and that a decisive victory in Flanders or Picardy will establish truth forever and a day. Such men still live, I am told.

II

My quest eastward, to the fields of France, where the red poppies seem like Nature blushing for the red blood of innumerable heroes, was for reality. Why should the wraiths of those ancient heresies haunt my path? Did they come to daunt or swerve me? Or were they subconscious memories of immaturity and perversity projected outward as a background to accentuate my findings? Or — for a moment the possibility stood over me as a torturing menace — were they the realities everlasting; the things for which men must ever live and die, which I need not have sought in the horrible mêlée of war,

but which dwell within brown covers on my shelves; the things which shall ultimately cure all the aberrations and abnormalities of this insane and suffering world?

One perfect day in June I tried to think it out in the squat little village of Domrémy, as I looked off over the rich fields of the Meuse country and saw the same physical features which Jeanne d'Arc saw as she tended her flock and held the lattice of her soul wide open. Jeanne was more real that day than all the councils and creeds of ecclesiastical history. The American soldiers felt her reality as they sang in mingled pleading and peremptory modulations: —

'Joan of Arc! Joan of Arc!
Do your eyes, from the skies, see the foe?
Don't you see the drooping *Fleur-de-lis*?
Can't you hear the tears of Normandy?
Joan of Arc! Joan of Arc!
Let your spirit guide us through;
Come lead your France to victory;
Joan of Arc, they are calling you.'

Boys from the Middle West, from New York and New England, from the mountains of North and South Carolina; sons of the Scotch Covenanters; descendants of the Dutch who fought under the Prince of Orange against the Duke of Alva; scions of the Puritans and Pilgrims; Methodists and Baptists and Unitarians, and probably every nondescript sect of America; singing, as they marched along the white roads, a song that was an urgent prayer to the heroine-saint of France! Yet not one of them believed dogmatically in the invocation of the saints.

Then, in the midst of my reverie, an airplane began to drone in the distance, and soon passed overhead with a whirl and roar which made the air vibrate painfully and drove away my musings. But I felt that I had come nearer to reality than at any time during many sad and anxious months. Behind and

beneath all our inherited or intellectual differences there is an identity which is indigenous to the human spirit, a postulate neither theological nor ecclesiastical, reached neither by logic nor by experience; but an enveloping and penetrating necessity holding us together as gravitation and cohesion and chemical affinity bind all physical substances. To define it is more than difficult: to call it 'faith,' or 'love,' or 'grace,' or any other term which has been mauled in the arena of polemics since the beginning of time, would be to endanger its recognition; to insist upon a new name might be to invite the birth of still another paltry sect. But it may be described as the instinct for establishing and retaining contact with the Supreme Being. This instinct has innumerable modes of expression; sometimes it seems crude and vulgar, and at other times beautiful and sublime. Fetishism, spiritualism, the invocation of the saints, astrology, the countless litanies of the churches, are all but dissimilar outreachings of the same instinct. Perhaps the least objectionable covering phrase is prayer.

When speaking to our troops, whether in the camps of the back zones or in hastily gathered groups at the very battle-front, I found that the one subject which did not lead to controversy or call for dissent was prayer. Amid the fluid conditions of war the theme could be stripped of all accessories of time and place and posture; it could be simplified to the point at which it fitted into every grade of intelligence or any kind of circumstance; it could be made so adequate that it expressed every yearning, hope, and fear which the men felt. When men are marching into battle along the muddy road or through the dripping forest; when they are lying out in No Man's Land with every nerve aquiver and the chilled blood drawing back into the heart; when they

rush forward in the wild charge, and see their comrades fall thick about them until the venture seems the most foolhardy and suicidal thing ever done; when they toss for weary weeks in a hospital and live through interminable nights of torture, prayer is the only exercise in which both mind and heart can find relief. It is an act so elemental that all the usual aids and habits and accessories of prayer are superfluous, and the men realize that they have established contact with the Divine, although the eyes do not close, or the lips move, or the knees bend. They have told me so.

Such is the first reality that I found at the Front. In the uncertain, or terror-shadowed, or anguished periods of a man's life, everything that had once seemed inseparable from civilization and culture is swept away, and there remains only the instinctive impulse to establish contact with God. And the act is sufficient, for the man becomes calm, brave, hopeful, or patient, as his need may require.

Sitting one Sunday morning in a trench which ran out from a desolated village in the Toul sector, my mind winged its way back to America, where men and women were assembling in the churches of 168 different sects. Shells were passing overhead, some from our artillery and some from the Boche. A skylark beat its way upward and its song pulsed down into the trench intermittently — rich and full when not muffled by a screaming shell. One hundred and sixty-eight denominations! And yet anywhere, at any time, and under any conceivable circumstances, any man can establish contact with the Infinite, without even the preliminary of bowed knees or closed eyes, and without an audible medium! One hundred and sixty-eight denominations, with their creeds, and rituals, and politics — stupid! —

a purely gratuitous stupidity too, the silliest practical joke a wrong-headed but right-hearted humanity has ever played upon itself! So I found myself laughing, while exploding shells knocked down a few more yards of the roofless walls in the village and while the lark still hovered and sang overhead in the blue sky. Then I thought suddenly of the mutual rivalries and jealousies and animosities of the competing sects, and I grew sad and angry that the one thing men hold in common should actually drive men apart when they seek to give it concrete expression.

III

Fortunately a considerable number of men are growing wiser, particularly those who have tried to exercise and apply their spiritual possessions on the various battle-fronts. No one can tell yet whether there will be a shrinkage or an enlargement of the content of faith as a result of the war, but there are certain to be many sharp reactions against ecclesiasticism. No foible of our intricate social structure has been hit harder than sectarianism; wherever the frightful drama which is to reshape the race is being played out, such things as Presbyterianism, Methodism, Episcopalianism, — yes, even Protestantism and Catholicism, — seem to be an irrelevance and an impertinence. What concerns men over there is not the differentiations, but the few vital elements which all churches and all individuals hold in common. And the agency through which this new mood works most fully is the Young Men's Christian Association. Not the Y.M.C.A. as the average American knew that institution before the war — an institution staffed by professional employees of a hybrid type, not ministers, but so nearly akin to the clergy that they could not be definitely classi-

ified; a body of men shot through with revivalism and pre-millenarianism — a kind of vigilantes who picketed the churches and sentinelled the creeds against a surprise attack by non-evangelicals; no, but a new and broader Y.M.C.A., spiritual without being sectarian, ethically virile and yet not puritanic, opportunist without huckstering basic principles, and withal thoroughly human and highly sensitive to the needs of the men it serves.

The feature which impressed me most profoundly was the amazingly wholehearted manner in which this institution took to its unique task. All types of men in its service were doing things cheerfully and enthusiastically which they had never dreamed of doing before, without regard to the effect upon the dignity of the position they had previously held, and altogether oblivious of the social or ecclesiastical status of their fellow workers.

'What denomination at home?' I asked a man in Y.M.C.A. uniform.

He looked surprised, implying that the question was as remote from the point as though I had asked whether his ancestors lived in Wessex or Mercia before the Norman invasion of England. He had lost all his equipment and personal possessions when the Germans made their ill-starred drive near Soissons in the middle of July; and he was in Paris only to refit.

'Unitarian; New England Unitarian minister,' he replied; and then, evidently puzzled, 'but this is the first time I have been asked the question in France.'

All the way from the port of debarkation to the red, quivering lip of the inferno, I saw clergymen serving the troops as Y.M.C.A. secretaries, and only by dint of inquiry could I find their denominational affiliation. They were doing things also which had never been taught in their respective

theological seminaries. A prominent Baptist minister had been handling boxes for months, ten hours a day, in a Y.M.C.A. warehouse; an Episcopalian rector had ceased to think about the channel whence his grace of apostolic succession flowed, and was running the cinema for a circuit of Y.M.C.A. huts; a Presbyterian divine drove a supply camion day after day, and had not found time to preach a sermon since his arrival in France; a Methodist preacher organized the athletics for an entire division, including boxing and wrestling, and he did it with all the fervor that his ministerial predecessors had put into camp-meeting revivals.

These are not isolated instances, but genuine types; there are hundreds of clergymen, representing all the denominations, who have cast aside all prepossessions and established habits and are bending themselves to serve the American, French, and Italian troops in any way that will bring comfort and profit to the soldiers or heighten the morale of the Allied armies. Side by side with them are college presidents and professors, bankers, judges, lawyers, stockbrokers, manufacturers, merchants — all ineligible for military duty, but eagerly giving themselves, under the Red Triangle, to any form of work, however menial or apparently trivial, which can serve the soldiers.

The individual may have as his personal motive the increase of efficiency in the fighting units; or he may make his sacrifices on purely humanitarian grounds; or he may have been carried to the front by a surging patriotism which could find no other outlet; or he may be consumed by a passion of righteousness for the overthrow of foul tyranny; it does not matter — he is nevertheless part of an organization which represents the application of a religious motive. In a broad but in a

very real sense, the Y.M.C.A. has as its *raison d'être* the interpretation of Christianity. If it were using the exigencies of war as an opportunity for self-enlargement, ninety per cent of its present staff would desert its standard immediately; if it were exploiting its facilities for any one particular brand of religious propaganda, its best friends would turn and rend it; if it were representing a merely theoretical or sentimental type of religion, it would be ridiculed off those heroic, hallowed fields of Europe in a trice. The Y.M.C.A., as I saw it in France, and as I studied it with critical and incredulous eyes, stands for one thing, and for one only: an interpretation of religion which shall be of immediate and permanent benefit to the soldiers.

'Of immediate and permanent benefit!' The separation must not be made too sharp, but a classification ought to be attempted. As immediately beneficial I would place, —

1. *The Canteen.* It was at General Pershing's request — which is practically a command, as the Y.M.C.A. is a recognized part of the American Expeditionary Force — that the Y.M.C.A. took over the Post Exchange in France. A canteen is a general store in which tobacco, cigarettes, chocolate, soft drinks, and sundries necessary to the soldiers' comfort, are sold at cost. Canteens are extremely difficult to run for three reasons: the Y.M.C.A.'s lack of experience in store-keeping; the scarcity of provisions owing to restricted shipping and rail-transportation; and, at the front, the constant movement of army units. Nevertheless, despite all obstacles, they are operated with an amazing degree of success, and the presence of American women as canteen workers serves to make them attractive and homelike.

2. *Amusements.* Several hundred actors, actresses, vocalists, lecturers, and

general entertainers have been sent to France, to travel from camp to camp and station to station, giving free entertainments in the Y.M.C.A. huts.

3. *Organized athletics.* Under trained physical directors, often coaches from universities and schools, every possible form of athletics is organized within the army unit, and all the equipment provided gratis by the Y.M.C.A.

4. *Writing and reading rooms.* All the material for correspondence is given away and the soldiers are encouraged and urged to write home as often as possible. Right in Château-Thierry, while the battle which will be known as the Gettysburg of the war was raging within a few kilometres of the place, I saw the Y.M.C.A. providing every facility for the men to write letters of assurance to their friends in America. During that same battle I not only saw cigarettes and chocolate given away in the front lines of the battle, but I coöperated in the welcome distribution. The American Library Association distributes books and magazines (though not yet in sufficient quantities) through the Y.M.C.A. huts.

5. *Hotels, both for enlisted men and officers, and officers' clubs in many centres.* These forms of immediate service take much of the sting out of foreign duty and bridge the gulf between the old civilian life and the new military régime.

As permanently beneficial I would place:—

1. *Opportunities for worship.* Religion is not overemphasized by the Y.M.C.A.; it is not thrust upon the men at inappropriate times; it is not confused with ecclesiasticism; it is never presented in a polemical or dogmatic form. Preachers of every type speak to the men at certain advertised dates, and almost invariably with simplicity and directness on a non-

controversial and universal aspect of religion or ethics.

2. *Education.* A plan has been devised whereby any man, from the utterly illiterate to the college graduate, can pursue studies either needed in military service or valuable after demobilization. The Y.M.C.A. is also arranging for American undergraduates to pursue their studies—for which credit will be given in the home college—in one of the European universities during the period between the cessation of hostilities and embarkation for home.

3. *Banking.* Tens of thousands of soldiers are sending portions of their pay to America, through the Y.M.C.A., either to be placed on deposit, or for the benefit of dependent relations. Besides this, the Y.M.C.A., even at the front, acts as an exchange, giving the men a rate a little better than the current Paris rate.

To carry on this work the Y.M.C.A. has more than 3000 secretaries in Europe, supplemented by over 1000 French civilians. These operate about 1500 huts and stations in the sectors held by American and French troops. Up to August first, there had been over fifty casualties, eleven of whom were killed while on duty. Of the ministers engaged in the work, four have met death while serving at the front and many others have been permanently injured. This record shows the hazards of the task and also reveals the calibre of those who have volunteered for the service. Some day a French historian will write the splendid story of how the American Y.M.C.A. steadied the morale of the war-weary French army in its darkest hour, and adequately chronicle the inexpressibly gracious contribution made by this institution through the *Foyers du Soldat*. Italy, Macedonia, Russia, Palestine will be able to add thrilling chapters.

Of course, there have been mistakes of administration; anyone can point out scores of things which the Y.M.C.A. might do or could do more efficiently. Similar criticism may be offered concerning the plans of the Allies, concerning many phases of our own military programme, and concerning the marvelously beneficent work of the Red Cross. Human frailty assures a vein of weakness in every human enterprise. But here is a venture in religion more daring than anything that has been undertaken in the history of the world — an institution, dependent not only upon voluntary contributions for support, but dependent also upon untrained and inexperienced volunteers to realize its object; working more than three thousand miles from its base of supplies; crippled by the physical impossibility of obtaining its equipment; merging in its plan a score of functions which have never before been operated in unison; hampered by a thousand restrictions which military necessity lays upon it; held under suspicion, or openly libeled, by men who are too dense or coarse to see the splendor of its endeavors; and doing it all without thought of praise or reward.

Opportunities for humane and morale-conserving service are so innumerable in France that no unselfish effort is superfluous. Knitted together as an organism, if not as an organization, are several societies which reveal the intrepid and chivalrous spirit of America. Their efforts are never competitive, because, if each multiplied its personnel by a hundred and possessed unlimited equipment and supplies, there would still be areas left untouched. The Y.M.C.A. and the Knights of Columbus coöperate in a most illuminating manner, and if they vie with each other at all, it is in the measure of devotion which each can give. The Salvation Army is doing everything that its

means will allow, and doing it with utter impartiality to Catholic and Protestant. And it would be cavalier, indeed, not to praise the Young Women's Christian Association, which has ventured into pioneer paths without even momentary reluctance. At the base hospitals I visited the huts for American nurses, where the Blue Triangle means all the refinements and seclusions and respites which the splendid bands of nurses had been accustomed to at home. Hostess-houses for our enlisted men are being opened as rapidly as possible, in which the soldiers find an environment possessing all those feminine touches which they miss more than anything else while on foreign service. For the women munition-workers the Y.W.C.A. has founded the *Foyers des Alliées* in a score of places, and the Frenchwomen are flocking to them with unbounded gratitude, happy beyond expression because of the new comradeship. The *Union Chrétienne de Jeunes Filles*, or the club work for girls engaged in government employment, was started at the invitation of the French government and is already outgrowing its facilities. In one of the spacious buildings, right in the heart of Paris, the girls gathered about the piano and sang first 'Verdun,' and then 'The Star Spangled Banner,' with an *abandon* which made one feel, not only their appreciation of the sacrifice being made by American women on their behalf, but a recognition of the genuine sisterhood which has been established in the common tragedy.

But everywhere in France it is service; no one has a right there except as a servant of the great cause, or as a servant of those who are carrying that cause through to a final victory. Never before have there been such suffering, fear, and horror in the world; but never before has there been such uncalculating devotion. On a scale so vast that

no one can measure or chronicle the length and breadth and height and depth, Christ is overthrowing Caliban.

IV

To say that one feels the universal realities more vividly and convincingly in prayer and service, in establishing an immediate and personal contact with the Divine, and in ministering unstintingly to the transient or permanent needs of one's fellows, is not necessarily to brand other expressions of religion as false. Nor is it an attempt to put all the rich manifestations of the multiform spiritual nature of man into tabloid form. During these passionate days there are very few thoughtful men and women who are not groping. Strange dissatisfactions are creeping into the most secure and comfortable sanctuaries. Nothing to-day is considered essential because it has been long established. A faith which was decorative when men droned out their days in offices, shops, parlors, or country clubs, will be discarded with scorn if it fails to nerve and sustain and comfort men amid the horrors of the battle-front. Realities are the things that are relevant under all conditions. Books from the front which unveil the more solemn phases of the individual soul are the ones most eagerly read. What are to be the permanent, that is to say, the spiritual, contributions of this terrible but glorious struggle to humanity? Whatever treaty of peace is signed, it may some day be abandon-

ed or modified; whatever changes the war may make in the currents of trade, they cannot hold their new direction forever. But the spiritual marks left upon the race will abide till the end of time, and no subsequent events will be able to erase them. To know what the days and nights of unrelieved strain and pain are writing into the lives of one, two, or three millions of men, to know what spiritual experiences are imprinting themselves upon the retina of their souls, is to know what will be the distinctive marks of religion for many years to come.

When I found men instinctively establishing immediate contact with the forces of the Unseen World, and doing it without the formal accessories with which the act has always been associated; when I saw a religious institution rendering every possible form of service and on an unprecedented scale; when I realized that each of these things excited no comment but was accepted as normal; then I felt sure that many of the artificialities and superficialities which now separate men into a multitude of competitive sects must pass away as the operative factors in religious development. And when, in the security and quietude of my home, I read again the story of Jesus Christ as told by the three Evangelists, I found little in it that was not the record of how the purest, bravest, and divinest of the race established and maintained contact with God and dedicated Himself entirely to the service of his fellow men.

THE TOP OF THE HILL

LETTERS OF AN AMERICAN STAFF OFFICER

Sunday, *July 21, 1918.*

I WISH there were some way I could give you an account of all I have seen these past three days! In years to come I'll still be telling you of the battle of the Aisne and the Marne, where our division received its baptism and found its soul. You have read and reread, I know, of these glorious days—the 18th, 19th, and 20th of July—and still we are advancing! On the afternoon of the 17th the division was carrying on its usual training and drill back of the lines, with no hope of seeing fighting for a month to come. At 4 o'clock we had orders to go to the line ready to attack at 4.30 the morning of the 18th. A busy night it was! A real test for all our departments, for our units were pretty well scattered with the French. On the night of the 17th General C—— and I went to a town nearer the lines. We spent the short night in a farmhouse, with a beautiful garden full of roses. A fearful thunderstorm came before dawn, and left a rolling mist that served our troops well as a screen for their advance. At 4 o'clock we were in a little observation post on the edge of a wood, looking out over the ground where our troops were to advance.

Just before dawn every gun saluted the Germans. The barrage is like the Grand Cañon—it can't be described. It is a noise so much greater than any other that no words can do it justice. As our men advanced, the mist rolled ahead of them. When they captured the first German line the sun came up, and we could see clearly, on the crest

ahead of us, a little shattered village—the first trophy of the ——th Division. We remained there some time, listening to the regular reports that came in from our troops. They passed every point on time and performed every task given them, God bless them! How good it was to see the Boche run! He was completely surprised. I passed over the battlefield later. One German battery was quite interesting—the guns in place, ready to serve. I don't believe the gunners had fired a shot. Their breakfast—black bread, raw corn, and a little pot of coffee—had not been touched. Most of the gunners were there on the ground, with their faces turned toward Germany.

Two of our men had given their lives to take it—and they faced Germany, too. Our dead are buried on the slope of a hill beside a little village. We brought them all together. They are so far from home, poor fellows! What a wonderful range of feeling war gives you! There was the great joy of our first success, then the pity for our dead and the sight of our wounded as they came back to us. They were so brave, they never whimpered, and often smiled and asked how it was going. They do enjoy beating the Hun!

It was a cheery sight to see long columns of German prisoners coming back along the roads. Our men are quite gentle with them. They treat them decently, in a very impersonal way that the Boche does not understand at all. Most of the prisoners admit they have had enough and are tired and sick of the war.

These are such beautiful, cool sunny days — such a contrast to the pain and sweat of war! How I hate war! But I hate the Hun more, and I am so glad to be here doing my little part in it. We have moved on again, leaving a very beautiful, ruined, and sad château, that has just managed to survive four years of war. It had a large park about it, with beautiful lawns and a forest nearby for the hunt. It belonged to the Waddingtons, and seemed full of memories of very happy days. In my office-room there was a beautiful portrait of a sweet-faced grandmother, who looked down upon me while I worked at my desk. I had grown very fond of her.

We cleaned up the château thoroughly and left it in better shape than we found it. But we could n't repair the chapel — it had a shell-hole in its roof and plaster all over the floor. We are now in a middle-class, ugly French villa, comfortable, but with no other attraction. As we move forward, we are going to have very small pickings for quarters. The French artillery has actually laid all the towns down flat on the ground. Beautiful little villages are just piles of stone and brick. It is terrible to see them destroy their own homes to drive out the filthy Boche. Just as a beautiful woman would cut off her hair were there vermin in it.

August 4, 1918.

I am writing under difficulties. As we advance through this country the shelter grows scarcer, for all the houses have received at least one shell; some so many that they are no longer houses.

Last night we slept in the remains of an old farmhouse. The Germans had left it hurriedly, and it was in a frightful state of disarray. To-night we are better off — we are in a little village bakery! I always have my own cot put up so I have thus far escaped the horror of the small, invisible enemies that live

in German beds. A German general occupied this place two days ago — his sign is still on the door. What glorious days! We must not be too optimistic — this is not the end, but it is the top of the hill. The Boche made a fatal error when he started this show on July 15, and he is paying for it. And it will affect all his future operations, and also the morale of his men and women. The prisoners are all hungry and very tired of war. Many of them are just plain deserters, not prisoners. Last night in the rain and wind our troops were cheerful. I saw them marching to cross a river after the Hun. They joked and cheered each other as they splashed along. It is wonderful the way they stand this fighting all day and marching all night. To-day I had a good bath in a little stream nearby, and I am quite ready for a good night's sleep between clean sheets in my little cot.

Between sentences in this letter I am ordering ammunition up to the front and arranging for wounded to go to the rear. We give them hot coffee at the dressing-stations. They are all very patient and very quiet.

August 7, 1918.

I have been so busy I could n't write. Problems of supply are terribly exacting and never cease. The men must have food and munitions, else the thing cannot go on. They have both, but it is a scramble over wet roads, through a rough country. The panorama by my door to-day is quite varied. Our wounded, German prisoners, trucks full of good white bread and American beef going forward, and men coming in constantly to ask for anything, from a motor-cycle to a 3-inch gun.

Yesterday I had a wonderful hour. A surgeon at the front reported ninety refugees in a cave near our line. They had taken shelter there from the shelling and for three days had been without

food. He asked me for transportation, and I sent three trucks, with Sergeant Baer in charge. He was delighted with the job and took them there and back safely, through shell-fire. There were old women, and old men, and young mothers with their babies. One little girl had her dog under her arm as she got out of the truck. I had had a hot dinner made ready for them at the Headquarters troop, and it was a joy to see them eat.

How gentle American soldiers are! If you had seen a brawny, muddy soldier helping an old French grandmother across the road to the kitchen, it would have delighted your soul. It made me very proud of our men. They stood about, smiling and helpful, and just stuffed the refugees with everything they had in camp. After dinner and the ceremony of thanks were over, I sent them on to the French refugee society. What a horrible thing war is! These poor people no longer have homes, the shells have destroyed everything that was theirs. The deliverance from that hell-hole must have been an unspeakable relief, but what can the future have for them? France is such a compactly settled country, that if one person is displaced, it is a problem where to put him.

August 12, 1918.

What wonderful news to the North of us these past few days! We are all rejoicing over the British thrust about A—. This morning we were relieved by another division and the dear old —th is now marching back to a well-earned rest. Since the 18th of July it has fought and marched, always under some kind of fire, but always going forward. They are tired — very tired — but happy to have been in such a joyous fight. I am tired, too. I got a good

bath and to-night I am going to sleep in a nice clean tent in a little orchard, near the farmhouse that is our headquarters. How peaceful it all seems back here — the fields are all clean and tidy, and oh, so quiet! For three weeks now I have caught my sleep as best I could, and my cot was always shaking from the big guns. You can't imagine the rest I have had in these few hours I've been away from it.

I am sending you the thanks we got in the French orders. Keep it for me. In years to come it will bring back to me these days. These wonderful days! No matter what the Boche does, he can never rob us of our joy at beating him in the second battle of the Marne. We don't know where we are going now. I imagine we will have a rest somewhere, fill up our losses, and get in again before long. Some people think that possibly the war may end this fall, but there are no real signs of it here. Just rumors that Austria is ready to quit. What a glorious thing the end will be — to know the Hun is beaten! For Hun he is! Everyone is entirely confident of a complete and final victory.

August 16, 1918.

As we get farther from the front, the country grows more beautiful. No Boche has ever been here to leave his hideous scar. Our headquarters is now partly occupying a beautiful château, that in peace times belongs to the Duc de la R—. Do you remember in *The Marble Faun*, where Miriam had been for two days in the house without discovering the faun? It would be perfectly possible here — I never saw such a huge place. The château and chapel date from the twelfth century. We remain here a few days, then will move to a rest-camp till we are used again.

CHINA: HER RELATION TO THE WAR

BY JOHN C. FERGUSON

THE Provisional Constitution of the Republic of China was prepared in haste, to meet the immediate urgency of the adoption of some form of government which should replace the overthrown rule of the Manchus in the central and southern provinces. The Manchu government was functioning in Peking as usual when this Provisional Constitution was adopted by Sun Yat-sen and the band of young patriots whom he gathered about him in the historic city of Nanking, which had been captured from its former rulers. The haste with which this document was prepared accounts for many of its glaring deficiencies; but in one respect, and that the most important, this provisional constitution is clear and emphatic.

The first two articles of Chapter One read as follows: Article I. The Republic of China is composed of the Chinese people. Article II. The sovereignty of the Chinese Republic is vested in the people.

Here was democracy, unadulterated and aggressive, bidding defiance to the ruling, autocratic Manchu dynasty. It is by no means certain that the young men who were responsible for the writing of this remarkable document agreed as to the form of democracy which should be introduced into their country. Doctor Sun was well known to favor a type of government in which power should be directly exercised by the assembled people. Other leaders favored a representative system of government, in which parliament should

act under delegated authority. Both classes were, however, sincerely desirous of substituting democracy for autocracy, and of making this form of government permanent in China.

The rule of the Manchus for two and a half centuries had not been oppressive when considered as a whole, in comparison with the rule of former dynasties. It revised the severe laws of the preceding Ming dynasty, and kept strictly its promise of not increasing taxation. It had yielded to the demand of the people by promising a constitution in which parliamentary rights should be recognized. It gave wide powers of local government to the provinces, and it refrained from using the national army as a means of wresting power from the provinces.

If China were to have any form of monarchical government, there can be no doubt that it would have been content to remain under the Manchu control, and would have set itself to the task of eliminating the corruption which had grown rampant under the degenerate rule of the Empress Dowager and her successor, the Prince Regent. But China's young manhood wanted no form, however progressive, of monarchical government. It had determined for itself a future in which the sovereignty of the nation should rest solely in the people.

Along with the autocracy of the ruling dynasty, there had survived in China a form of intellectual feudalism in which the successful candidates in the literary subjects provided for civil-service ex-

amination were recognized as the leaders of the people. Among the four 'classes,' scholars, farmers, laborers, and merchants, scholars stood at the head. These scholars were the direct successors of the feudal knights, and were known by the same name as their military predecessors. In the Central Government at Peking, noted scholars always occupied the chief places of honor and influence. In the provinces, these intellectuals were able to control local legislative acts. The viceroys and governors of every province sought to conciliate this class and to bring it to their aid in difficult questions of administration. In the establishment of the Provisional Constitution, the prestige of this scholarly class was swept away by the same current which destroyed autocracy. Young China would have none of governmental or intellectual over-rule. The power over mind and body should, according to the new order, be vested solely in the people.

The Provisional Constitution, which was to do duty for a few months only, until a permanent constitution could be adopted, has now been in force for more than six years. It has survived the onslaughts made against it by Yuan Shi-kai, has proved itself more desirable than 'the Constitutional Compact' drafted by Dr. Frank J. Goodnow, and came back into operation after the abortive restoration of the Manchus in July, 1917. The inherent strength of this document must be a surprise even to the men who drafted it, most of whom are still living. In its provisions for legislative and administrative methods, it must be considered inefficient, if not, indeed, confusing; but as a statement of human rights, it contains the noblest sentiments which have ever been expressed in the Chinese language.

The most disastrous weakness of the Provisional Constitution is the provision in Article 54 that 'the Constitu-

tion of the Republic of China shall be adopted by the National Assembly.' This has been interpreted in the narrow sense that it is the exclusive duty of the provisional National Council to draft, as well as to adopt, the permanent constitution. The first Constitutional Drafting Committee, which met in the Temple of Heaven, Peking, refused to admit delegates sent to it by the President of the Republic, Yuan Shi-kai, and claimed that he had no right to interfere with, or suggest plans to, a committee of the National Council which was charged by the Provisional Constitution with the sole right of preparing the permanent constitution.

There is some palliation for this extreme view in the fact that it was known to the National Council that Yuan Shi-kai was an ambitious man, determined to secure for himself as much personal power as possible. The temporary advantage of scoring a point against a powerful antagonist beclouded the minds of the members of the first National Council, and led them to neglect the more important provisions for the relations between Provincial and Central Government upon the stabilizing of which depended the future peace and good order of the country.

The result has been that the Central Government at Peking, consisting of a president, cabinet, national council (or parliament), and judiciary, has carried on for the last six years, with varying degrees of success in the four branches of government. There have been three presidents, a dozen or more premiers, and several legislatures under the name of council or parliament. The most permanent branch has been the judiciary, the personnel of which has remained fairly stationary.

The real government of the country has gradually but surely drifted into the hands of the military governors of

the provinces. In some instances these have been men who had previous administrative experience, but they either have been hold-overs from the military régime of the Manchus, or are men who came into prominence as leaders of the victorious Republican troops in the revolution of 1911-12. Some of them have been men with good education and with sound military training; there are other conspicuous instances of men who have attained this responsible position without education, without administrative experience, and without any sound military training. Their control over large bodies of soldiers has enabled them to terrorize and dominate the provinces. The worst condemnation of their administration as a whole is found in two facts: first, there is almost no instance of any constructive work for the good of the people which has been undertaken and carried to completion by any one of these men; second, practically every one of them has succeeded in accumulating a large fortune. During a long residence in China of thirty years, I have seen no administration so inefficient or corrupt as that supplied by these military governors. They have been allowed to continue in office and augment their powers on account of the failure of the Central Government in Peking to provide a permanent constitution.

Only one article of the permanent constitution has been passed by a National Assembly. This was the 'Presidential Election Law,' adopted October 4, 1914, and promulgated on the following day by the provisional president. It provided for the election, term of office, oath, and duties of the President of the Republic. Under this law, Yuan Shi-kai was duly elected as President, with Li Yuan-hung as Vice President. Under its provisions, Li Yuan-hung succeeded to the presidency on the death of Yuan Shi-kai, and Feng Kuo-chang was elect-

ed Vice President. Similarly, under its provisions, Feng Kuo-chang became Acting President on the retirement of Li Yuan-hung in July, 1917. It is thus clear that the offices of president and vice president have been filled in strict conformity to existing constitutional requirements up to the present time.

According to the provisions of this election law, a new president must be elected during this year, 1918. There are several aspirants for these high offices of president and vice president. Many of the troubles which have disturbed the provinces during the last few months can be accounted for as attempts to gain power and notoriety on the part of possible presidential candidates. Without hazarding a guess as to the name of the next president, it is safe to conjecture that it is not that of one of the disturbing military leaders who have fattened upon the provinces.

The most obvious duty of the leaders of China, of all factions, is to go on with the drafting of the Permanent Constitution. It has seemed to me unwise for the National Council to arrogate to itself the sole responsibility of drafting the new constitution, though there is no doubt of its full legal right and responsibility for the final adoption of this important document. The work of drafting should be carried on by a committee representative as largely as possible of all branches of the government. Under the Provisional Constitution, these are said to be four: the National Council, the President, the Cabinet, and the Judiciary. If a new Constitutional Drafting Committee could be appointed, in which each of these four branches should be equally represented, the best wisdom of the country would be employed. The draft constitution completed by such a committee would then be presented to the National Council for final adoption, and the basis for the future stable government

of China would be permanently laid. Such a committee would provide a due balance of power between the executive, the legislative, and the judiciary in the Central Government, and would also establish workable relations between Provincial and Central administrations.

Although having no permanent constitution, the Republic of China has been called upon to face more difficult problems of foreign policy than had been experienced since the beginning of foreign intercourse. The outbreak of the European war resulted in an armed conflict between German and Japanese forces on Chinese soil, with the object of gaining control of the port of Kiaochau, which China believed to have been wrongfully wrested from her in 1898. In the Japanese attack upon Kiaochau, China protested against the violation of the neutrality of her soil and the landing of the troops at Lungkow, even though this place might be the best strategically for an attack on the German fortresses. Protestations being in vain, China compromised, and consented, against her wishes, to the fixing of a thirty-mile zone of military operations.

The cessation of military operations in Shantung province which followed the capture of Kiaochau was soon succeeded by the presentation of the famous Twenty-One Demands. During last year, a new and delicate problem was created by the adoption of a system of civil rule for Kiaochau and the railway zone of Shantung Province. In all these intricate and embarrassing relations with Japan, China was handicapped by the lack of coördination between her Central and Provincial administrations.

Laudable actions of the American government have also accentuated China's difficulty. After the protest of that government against the policy of

submarine warfare inaugurated by Germany, a formal invitation to take similar action was extended by the United States to China. When the United States declared war against Germany on April 6, 1917, China was again urged to follow her example. On account of the acute crisis which had arisen between the military governors of the provinces, assembled in a conference at Tientsin, on the one hand, and the President and Parliament on the other hand, an immediate reply could not be given to America's invitation. It was not until after the attempt to restore the monarchy had been frustrated and an understanding had been concluded between President Feng and Premier Tuan, that it was possible for the Peking government to follow America's lead, with the result that on August 14, 1917, a presidential mandate was issued declaring war against Germany and Austria-Hungary. It was issued on the authority of the President and Cabinet, without reference to Parliament, which had been previously dissolved by President Li Yuan-hung, after a period of inaction during which most of the members had left Peking.

The strict sect of the parliamentarians, which has sought to maintain the rights of the Provisional Constitution, still protest that the act of the President and the Cabinet in declaring war was *ultra vires*. Considering the wholehearted support which has been given by the country to this hostile declaration against Germany, these doctrinaire objections need not be considered as a serious factor in the situation. They emphasize, rather, the urgent need of the early adoption of a permanent constitution.

America's position in China is unique. It has not been exposed to the suspicion of selfish aggrandizement, for America has never seized one foot of Chinese territory. America has also

had the credit of leadership in the promulgation and adoption of the theory of the territorial integrity of China, and of an equal opportunity for all nations in commercial development. Its position was rendered still more honorable by the return of a portion of the Boxer indemnity, following a careful revision of the expenses incurred by the American government for military and naval operations during the Boxer outbreak of 1900. Other nations, up to the present time, have failed to publish the exact amount of their necessary expenditures for expeditions during that year, and have contented themselves with receiving from China the full amount of the lump sum provided by the Protocol of 1901.

America has the further prestige of being the model after which China has determined to plan her form of government. The Republic of China has natural and incontestable affinities with the American Republic. It looks to the United States, not only as a model for its system of government, but also for continuous and friendly support of the republican institutions which it is seeking to develop. Up to the present time, it is the only republic on the continent of Asia, and, as such, its eyes are turned to America for substantial, sympathetic support.

The permanence of a republican form of government in China must now be taken for granted, even though for the moment the dominance of military leadership must also be recognized. The disturbances in the provinces show that this military usurpation cannot be permanent, and that China cannot be governed, either by her own people or from without, by any form of military despotism. The consent of the governed is a principle thoroughly ingrained in the past history and present aspirations of the Chinese people. This is a fact to be reckoned with by

the contending elements in China, as well as by all foreign nations which have dealings with her. There is but little danger of such mob-rule as that of Bolshevism. The present danger is confined solely to a monopoly of power on the part of military leaders.

To offset and prevent such a consummation, several things are needed. In the first place, there must be the immediate adoption of a permanent constitution which will give due recognition to the rights of the various branches of the Central government, while at the same time it provides for a just distribution of authority between Central and Provincial administrations. In addition to this, there should be a hearty coöperation of the powers which are especially interested in the welfare and development of China. Fortunately these powers are now allies in the common cause against Germany. If Great Britain, France, Italy, Japan, and the United States can come to a common understanding as to the part China shall play in the war, and if each of these powers will disavow any desire for selfish aggrandizement, while all agree to the disinterested development of China's resources in helping to win the war, a new stimulus to the unification of China will be supplied.

The third necessity is the recognition of the inherent permanency and strength of the new republican life of China. With such an understanding, there would follow an entire elimination of the present latent distrust of Japan in her relations with China. A common understanding among all the Allied powers as to China's participation in the war would allow any one of them to assume the leadership of China during the continuance of the war, without pestiferous suspicion that such leadership conceals the invidious purpose of future domination of this new Republic.

THE CONTRIBUTORS' CLUB

PHILOSOPHICAL MUSH AND LITERARY JOHNNY-CAKE

THE truism that history repeats itself holds in matters culinary as well as political. Because an Austrian arch-duke was assassinated, we go sugarless to bed and rise to munch dry toast. For us, however, there is the mitigation of pone and johnny-cake and all the polyglot progeny of Indian meal — toothsome viands long familiar to the American palate. Not so to our English allies: to them corn-meal is a forced and unsavory necessity, hard to cook, hard to relish, hard to digest.

Yet the complications arising from the Austrian assassination are not the first occasion of this effort to conform to American diet. In the middle of the last century the potato rot and the ensuing famine made of Ireland 'one vast, silent dissolution'; poverty, hunger, death stalked naked through the land; lanes became charnel-houses and hedges funeral palls. America, generous then as now, sent shiploads of grain and corn across the sea. But what to do with the stuff after it arrived? There was the rub. Hence arose correspondence, publication, demonstration.

Elihu Burritt, then in England, published recipes in all the newspapers, 'totally destitute of significance to any creature here,' snorted Carlyle, no more tolerant of the dietary than of the political theories of the great pacifist. Evidently the experiments in the kitchen of 5 Cheyne Row had not been successful; at least, they had not been to the liking of the master. He had Indian meal as a substitute for potato 'daily to meat at dinner, though hither-

to with considerable despair.' In this predicament it occurred to Jane, the astute, the practical, the wise, to seek expert advice. Consequently, spurred by her restless will, Thomas wrote to his friend across seas, begging information from Mr. Emerson, or Mrs. Emerson, or 'the Miller of Concord (if he have any tincture of Philosophy).'

This was in the December of 1848, fourteen months after Emerson had wended his way to the Chelsea house at ten at night, when the door was opened by Jane Carlyle, 'and the man himself was behind her with a lamp in the entry.' Whether during that visit, when the flood-gates of talk were opened, the river, 'a great and constant stream,' flowed into quiet back-stretches of domestic converse or dashed torrent-like over crags of philosophized cookery, there is no record to declare. But if a *Sartor Resartus* why not a *Cocus Recoctus*? This we do know — that Jane wisely trusted Emerson, and that Thomas wrote the letter.

First: how ought the concoction to taste? Bitter, causing the throat to smart and disheartening 'much the apprentice in Indian meal'? Evidently not. Probably the effect of too much travel on the nature of the meal; hence an attempt to grind it after arrival; no improvement; merely 'the addition of much dirt and sand.' What next?

Second: the difference between white meal, which looks 'brown-gray-white,' and yellow, 'beautiful as new Guineas, but with an ineffaceable tastekin of soot in it'?

Third: how to cook it? 'Let some oracle speak!'

These were serious questions, affect-

ing as they did the ever-serious matter of the Carlylean digestion, and hence the Carlylean philosophy, which might become more or less bilious as the 'tastekin of soot' became more or less effaceable. Accordingly they received serious attention. Not to the miller, — perhaps not even in Concord was there one of the tribe of philosophers, — but most prudently to those of his own household Emerson took the questionnaire.

Dr. Charles T. Jackson, one of the most eminent physicians of the time, Emerson's chief adviser in matters scientific, and his brother-in-law to boot, solved the first difficulty. Corn would grow musty if not thoroughly dried; but excessive heat, then thought necessary to such drying, parched the sugar and starch; it might be that mustiness could be avoided without the previous destructive degree of heat; a point worthy of experimentation, according to a letter of January, 1849.

So far the masculine contribution; but there are realms into which neither philosopher nor scientist properly enters, sacred to the higher domestic powers. So 'Lidian Emerson confidently engages to send you accurate recipes for johnny-cake, mush, and hominy.' Where are they now, those 'accurate recipes,' carefully copied by Mrs. Emerson? Is it possible that somewhere among unedited Carlyle papers they waste their promise of gold-brown cakes and steaming pudding, of nutty odor and delicate crunching taste? Or may it be that in some Concord kitchen breakfast-cakes are still made by Mrs. Emerson's rules, and Sunday-night supper still includes 'puddin' an' milk' as known to Emerson himself?

Vain the latter fancy. There be some things, as Dogberry sagely remarked, that are 'the gift of fortune,' and some 'that come by nature'; and no true

New England housewife ever cooked Indian meal by another's rules, only by that indwelling genius or *daemon*, in the vernacular known as 'faculty,' or 'judgment.' Wherever they may be now, the recipes were duly sent; and according to a letter of the ensuing April, were 'judged to be of decided promise, reasonable-looking every one of them.' Surely Mrs. Emerson endured much of philosophy; did she ever, one wonders, have a harder trial than to be told that her rules for mush were 'reasonable-looking,' and that by a man brought up on oats!

Also there went across seas a barrel of meal (not too dry) and a barrel of unground corn, 'Indian Cobs of edible grain, from the Barn of Emerson himself!' Even the capitals show that Carlyle was waxing dithyrambic; perhaps accounted for by the fact that all went 'without cost or trouble' to the recipients. But now a new difficulty: the grinding. The brilliant and versatile Lady Ashburton, who had been called into council over the recipes, helped again at this crisis. The ordinary English millstone was too soft to grind this hard corn without at the same time grinding itself, hence the mixture of dirt, soot, and sand, to which quite naturally Thomas objected and which Jane probably did not like any better, although doubtless she ate it with less outward protest. But the Ashburtons had mills and millers of their own; so off went the corn to be ground under their direction; and 'their cook, a French commander of a whole squadron, is to undertake the dressing according to the rules.'

Oh, for the pen of a ready writer — shall we say Shakespeare or Molière? — to write the drama of that squadron of cooks presided over by the chef of fame, distinction, and infinite worth, making mush in the kitchens of Bath House, Piccadilly!

Now at last Carlyle professes 'with contrition, that properly we have never tasted Indian corn before'; and then, inspired, not by his native John Barleycorn, but by the exotic and transatlantic johnny-cake, he chants the vision of the future:—

'It is really a small contribution towards World-History, this small act of yours and ours: there is no doubt to me, now that I taste the real grain, but all Europe will henceforth have to rely more and more upon your Western Valleys and this article. How beautiful to think of lean, tough Yankee settlers, tough as gutta-percha, with most *occult* unsubduable fire in their belly, steering over the Western Mountains, to annihilate the jungle, and bring bacon and corn out of it for the Posterity of Adam! The Pigs in about a year eat up all the rattlesnakes for miles round: a most judicious function on the part of the Pigs. Behind the Pigs comes Jonathan with his all-conquering ploughshare, — glory to him too! Oh, if we were not such a set of Cant-ridden blockheads, there is no *Myth* of Athene or Herakles equal to this *fact*; — which *will* find its real "Poets" some day or other.'

Had Carlyle known the American writers of the past as he knew his contemporaries, he would have recognized that the poet of Western corn was not to come but had gone. The poet of the rattlesnake and the pig may yet arise; indeed, it would seem inevitable that some robust disciple of the school of *Spoon River Anthology*, finding that classic timidly restrained and effeminately prudish, should sing the progress of the pig-pen, in heroic style commemorating the details of porcine life from juicy piglet to degenerate sow. But the epic of corn has been chanted in the once famous and now too-much-neglected mock-heroic of Joel Barlow. In lieu of those lost recipes in Mrs. Emer-

son's writing the directions from *Hasty Pudding* may be inscribed:—

Meanwhile the housewife urges all her care,
The well-earn'd feast to hasten and prepare.
The sifted meal already waits her hand,
The milk is strain'd, the bowls in order stand,
The fire flames high. . . .
First with clean salt, she seasons well the food,
Then strews the flour, and thickens all the flood.
Long o'er the simmering fire she lets it stand;
To stir it well demands a stronger hand;
The husband takes his turn: and round and round
The ladle flies. . . .
First in the bowl the milk abundant take,
Then drop with care along the silver lake
Your flakes of pudding; these at first will hide
Their little bulk beneath the swelling tide;
But when their growing mass no more may sink,
When the soft island looms above the brink,
Then check your hand; you've got the portion due;

So taught my sire, and what he taught is true.

NOTE. — There are various ways of preparing and eating it: with molasses, butter, sugar, cream, and fried. Why cannot so excellent a thing be eaten alone? Nothing is perfect alone; even man, who boasts of so much perfection, is nothing without his fellow substance. In eating, beware of the lurking heat that lies deep in the mass; dip your spoon gently, take shallow dips and cool it by degrees. It is sometimes necessary to blow.

INTERNATIONAL PITCH

Whenever my homiletic wick begins to sputter and smoke, I visit Vandeever. I do not rush at him, shouting, 'Oil! My lamp is going out!' Such tactless impetuosity would ensure me the same disappointment suffered by the improvident virgins of the parable. I saunter into his presence with a leisurely air of self-containment and a smile denoting inner peace. I have just dropped in to wish him well — happened to be passing — noticed an article in which he might be interested — crisp mornings we are having — and how are things going in the Conservatory? This may or may not deceive

Vandeever. I have often suspected him of suspicions.

Vandeever is a philosopher by profession, who teaches violin lessons as a side line. His studio is located at the end of a long bare hall on the third floor of a rambling building dedicated to the worship of the Heavenly Maid; though of an open-windowed autumn morning, when the whole plant is in full cry, so to speak, the racket is enough to frighten her away forever, were she half so temperamental as most of her votaries.

Because he is unkempt, cross-eyed and myopic, shaves only on Sundays, needs about eighty-five dollars' worth of dental attention, and is inclined to be irascible, I dare say the demands upon Vandeever for philosophical utterances are infrequent. Previous to my accidental discovery of him as a sage, I had known him only through his technical critiques of our stellar musical events, published in the *Daily Tribune* — bewildering monographs which read like a problem in physics pied with a receipt for plum jelly.

A vacancy having been created in the War Department of Zion by the sudden resignation of our contralto, I had strolled over to the Conservatory, hoping to interview an applicant; and, losing my way in the noisy old pile, I had turned the nearest knob to make inquiries. Vandeever was striding, jerkily, up and down the room over a threadbare path, which registered about two thousand rug-miles, gesticulating with his fiddle and muttering something about thumbs — flat thumbs — obviously to be disapproved.

He broke off long enough to tell me, snappishly, where the contralto held forth, his tone failing to recommend her. Perhaps she, too, had a flat thumb. I turned reluctantly to go, but Vandeever was not through with me. He caught me by the lapel, dragged me to

a dusty chair, and thrust me into it with the tip of his bow.

'You see,' he explained, 'they all do it! They will put their stupid thumbs flat along the neck of the violin — so! It is much easier — see — look!' I looked. He was demonstrating. 'But the correct position — to bend the thumb — to bend it — so — around the neck —' He was dislocating his thumb, each savage twitch of it being accompanied by facial contortions, fascinatingly hideous. 'It is awkward, at first, unnatural — tiring — but correct!'

'And interesting!' I added, with enthusiasm.

'Well; the flat-thumbed easily outdistance all the others, at the beginning. They learn to play tunes for their mothers' guests. They grow cheery. Meanwhile, the bent-thumbed make slow progress. They become discouraged. Only the few persevere. A year of flat-thumbings and the education is finished. Graduation may then be had into mediocrity. A year of correct posing and the bent-thumbed is just beginning to find himself. He may go on, on — no limit to his going on — on!'

Having torn his passion to tatters, Vandeever subsided into a clairvoyant state which seemed to invite remarks; so I ventured the conjecture that we are menaced by opportunism, these days, in every department of human endeavor. Vandeever rallied, at this, and nodded vigorously. Opportunism was the word. It stirred him to a savage diatribe which for length cost me my lunch and for intensity left me limp. The generation was a shiftless, spineless, ease-loving race of rotters!

I forgot to call on the contralto in my eagerness to get home and begin a sermon on 'The Flat-Thumbed School of Opportunism,' which was the first of many sermons for which I am heavily in Vandeever's debt.

All this is prefatory to saying that I have just now returned from the Conservatory, loaded to the gunwales with pitch, reeking with pitch — pitched within and without with pitch, like the Ark. Vandeever was standing in the far corner of his studio, when I entered, twirling a small padded mallet in his bony fingers and gazing vacuously at a huge chunk of brightly polished metal suspended from the ceiling by a silk cord. I had noticed the thing on previous visits and had always meant to ask about it.

'Well,' I saluted, cheerily, 'what's the good news to-day?'

Vandeever tapped the cannon-shaped object with his mallet, and a soft, mellow tone drifted lazily out of it, swelling until it filled the room like the smoke of incense.

'That is the good news, to-day, my friend,' said Vandeever, solemnly. 'That is *A*! It was *A* all day yesterday. It will be *A* all day to-morrow — next week — a hundred years — *A*!' Once more he tapped it, very softly, and it was as if the censer had swung again. Indicating his general environment with an all-inclusive sweep of the mallet, he continued, 'The soprano, across the hall, she wabbles and flats abominably: the piano, next door, it is out of tune: noise and confusion all about me here — but this —' he caressed his fetish — 'this is *A*!'

Anyone required to dig up ninety-four sermons per annum would know just what to do with that. It might be well to try out the sermonic significance of it on Vandeever.

'It is a joy to find something constant in this unstable old world,' I murmured, piously; for I felt that I was going to be talking about God, presently. 'Our houses burn up, our ships go down, our bubbles of ambition burst; but He is ever the same — without accidents, impulses, moods or caprice.

We always know just where to find Him — don't we?'

Vandeever had been too busy with his own thoughts to follow me, for his reply was irrelevant.

'International pitch!' he growled. 'Bah — what a word! International! How we do love to slosh about with big words — universal, cosmic, inter-racial, international — it will be a thousand years before we have need of them!'

'Tell me about "international pitch,"' I demanded. 'Does that mean that there is a standard note which all musicians recognize as the norm of tonic values?' I have picked up something of Vandeever's lingo, lately.

'No!' he snapped. 'That's precisely what it does not mean! You see, in 1859, the French Academy of Music decided to establish a standard pitch. They hoped to make it international. It was to be regulated by a tone vibrating at 435 per second in a temperature of 59° Fahrenheit. It must have been a cold day. The conference probably sat in cheap quarters. You know, the temperature of most music-halls is some ten to fifteen degrees higher.'

I recalled an occasion when I had heard Paderewski in an atmosphere which grew somewhat rich and nutritious as the evening advanced. Vandeever chuckled and remarked, apologetically, 'Very sensitive to draughts!'

With chastened spirit, I rushed him back to the main issue. 'You were saying that the temperature of the music hall is likely to affect instruments pitched for stability at 59°.'

Heedless of my remark, Vandeever went on, 'Each of the great musical centres of Europe had its old organ — no two pitched alike. It meant great expense to undertake such alterations as would unify them. The orchestra was more or less dependent, at that time, upon the organ. That's what ails

Europe, to-day!' he shouted. 'Too many old organs, each arbitrarily pitched! Nobody willing to rebuild his organ to conform to a standard! Each demanding, "If we must have an international pitch, take it from me!"'

The homiletic value of this was clear. One school of thought, meeting in the frigid zone of a high moral altitude, proposes a norm of conduct that promptly puts half the orchestra out of tune, down in the overheated atmosphere where most people have to live. And, of course, anybody could see that all Europe had stuffed its pockets with cartridges because each state had its own ancient and unremodelable organ. But where did we Americans come in? I asked Vandeever.

'Oh, as to that,' he responded, hopelessly, 'we have no such thing as "national" — not to speak of "international" pitch. Not because of ancient organs, however. We hate anything that does n't smell of fresh varnish.

'But our pitch has been going up — up — up! It's the speed has done it! You know — this ungodly gait we travel! Seventy miles an hour by steam on the rail; forty miles by gasoline on the open road! Walk fast — talk fast — eat fast — hurry, hurry, hurry! Be strenuous! Be stimulated! Be spicy!

'You remember that execrable tune brayed forth from every other open door and window, a little while ago — "Too Much Mustard"? That is the trouble! It began with mustard, when no normal person really needed mustard. Then, it was more mustard! Then quite enough mustard! At length, even the hardened and calloused were howling that the limit had been over-reached. "Too Much Mustard" — that is our problem!'

At this juncture, a thin-necked lad appeared, with a little black coffin under his arm, and Vandeever followed me to the door, still warning me against

the Ides of all the months in the ghosts' calendar.

'The fiddles are screwed up to the very point of caving in! The woodwinds have to transpose to another key!'

The door slammed, just as the kettle-drums were having their little tails twisted to satisfy the demands of a wicked and perverse generation. I wish he had said something about the oboe, which, they say, cannot be tuned, no matter what happens. Ah; I have it! The oboe is my senior deacon. Nor rising heat, nor accelerated gait, nor surfeit of mustard, nor any other creature can increase the number of his vibrations.

THE HIGH PRAISES OF MANURE

The sister, bringing a bowl of pink and cream tulips into the dining-room, set them down with great satisfaction on the table.

'Perhaps these will help us to escape from the odor of the barn,' she said, very impertinently blowing a kiss across the room to where there was no one.

'Who's that for?' I asked.

'Mr. Hamlin Garland,' she replied.

And I laughed, because I knew that ever since we had read that delightfully honest book of his, *A Son of the Middle Border*, one of its unaccountable exaggerations had rankled in her mind — that statement that there is no escape, even on a modern, model farm, from the odor of manure. I had enjoyed her sputterings — 'A book about a farm by a man without one instinct of a farmer.' 'A deaf man's appreciation of a symphony!' And one morning, as she stood smiling out through miles of green sunlight toward the high white clouds which stretched themselves out in prairie lines above gently rising wood-crowned hills, she cried suddenly, 'And the man who said that deliberately

'lived years in Chicago, where the air you breathe rubs right up against the heads of people whose hair is not shining clean!'

At the time I agreed with her tone, but still —

Because this spring, since three of the four men of our household have gone to war, I have of necessity grown familiar with what so constantly offended Mr. Garland's delicate nostrils. One morning, for the first time, I was making the hen-house perfectly clean. Arrayed in delectable garments, I was scraping the dropping-board with a large hoe. Of course I know that there are no low occupations, — only low workmen, — and I hope I can willingly clean a hen-house to make the world safe for democracy; but, after all, I was painfully conscious of my heroism. Fancy *me* carrying away manure!

Presently I heard this gay sentence from the sister who had taken the hen-house pump to pieces and was putting it together again, —

'It is not raining rain to me —

'T is raining daffodils.'

'Indeed!'

She must have seen from the tenseness of my nose that my mood was not entirely Wordsworthian; for, as she helped me to carry the filled basket to the little cart at the door, she said, 'You thought this was manure, did n't you?'

'It does seem to have some of the characteristics,' I retorted.

But she ignored me, continuing, 'You were mistaken, as usual. This is the color of your roses — the duskiness of Prince Camille, and the dawn of Sunburst, and the snow of Druschki. This is the very heart of the Allies' wheat. Don't you understand it? Don't you remember? This,' she said chuckling, 'is the victory that overcomes the hen-house — even our faith!'

I said nothing. A sister like mine

teaches one silence. That woman's view of opalescent hills is shut off by an outrageous great red barn directly in front of her house. Yet one day, when I cried, 'Oh, how beautiful this would be, if only that barn were not there!' she answered me, in amazement, looking straight at the horror, 'Barn? What barn? Do you suppose I'd have a *barn* in front of my house? With a view like that of the hills?'

And one day, as I cut the wheatless bread, protesting against the monotony of daily bakings, she said simply, 'Don't despise it. 'Tis the children's body, that bread — your own body. "This bread," He said, "is my body."'

So quietly we pushed the cart through the gate into the garden. She stopped by the larkspurs.

'These of yours need a little dessert,' she said.

One could see that she knows exactly how to balance a garden's rations, when one but glanced over the riotously blooming health of hers.

'Let me haul the tea-wagon around to them all,' I exclaimed, delighted over my own cleverness.

So we gave all that needed it a little posy pudding. And as we worked together, I was converted to her life of faith.

Since then, every Monday morning I clean the hen-house. I clean it, not grudgingly, not snobbishly, but with a hilarious spirit. The Lord loveth a cheerful giver! I carry away in that basket, not manure, — indeed, why should I associate with manure? — I carry away the glittering height of the tallest sky-blue larkspur waving in the windy sunlight. I carry away the glow of great dark pansies, hearing city friends cry, 'We never *saw* such pansies. Where do you get them?' I hear my cryptic answer, 'Hen-house.' I handle the apricot and rosy pinks of the columbine that dances like butter-

flies, and the blushing yellow of the snapdragons whose flowers the children snap on our ears for ear-rings, dewy summer mornings. I feel the wavings of limpid oat-fields, playgrounds of the chasing shadows of sunlit clouds. I wear out my precious muscles giving bread and milk to Father Europe's gaunt orphans. I break my back personally supplying rations to the whole army of Justice which fights for me. Manure? Who said manure?

Yet why not say it? I, for one, have found that the more I know of it, the more highly I esteem it. The dictionary, too, honors it greatly. Manure, it says, is only another form of manœuvre. When the land army manures its fields, it manœuvres its battle. Every day explains it, morning and evening praise it.

The other night my brother-in-law and I drove quietly to meet the sister through the tender spring darkness, which was thrilling with the wonder of the bursting pink hickory buds. When we had chugged up a deeply rutted road, suddenly at the top of a hill, from the valley spread out below there came to our nostrils the revelry of the feasting fields.

'Do you mind that odor?' he asked.

'Mind it!' I echoed. 'I love it!'

'So many don't understand it,' he answered, wistfully, I thought.

'Stupid blind noses, they are,' I assured him. 'Grudging the good old fields their bite. Let's hope they'll be as enriching when their time comes to fertilize the earth.'

At that moment, the fields lifted a great song, and I joined them.

'I am not going to be cremated,' I cried to him.

He is perfectly accustomed to remarks of that sort.

'I'm not even going to be buried at sea' — though that has always seemed the most desirable way of disappearing. 'I want immortality for my body, in leaves — in fragrance — in color — I want to be food for something — little leaves on the very top of willows — or, best of all, a candle of a hickory bud. Don't you think it's possible — couldn't I be of some use if I'm buried, even if I can't be a poppy petal in Flanders?'

I waited intently for his answer.

'Don't you think I would have some value?' I insisted.

'Well, perhaps, if you're *very* good — you *might* —'

'Just a darker green spot in a clover field?'

'Well, maybe a four-leaf clover at least, if you keep on being very good.'